



BRISTOL BAY SALMON (Oncorhynchus sp.) - 1982  
A COMPILATION OF CATCH, ESCAPEMENT, AND BIOLOGICAL DATA

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July 1986

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Data presented in these reports is intended to be final, however, some revisions may occasionally be necessary. Minor revision will be made via errata sheets. Major revisions will be made in the form of revised reports.

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## ABSTRACT

Numbers of Bristol Bay Pacific salmon (*Oncorhynchus* sp.) that were either caught in the commercial harvest or counted as escapement in the rivers during 1982 are summarized. Sex and age composition, mean lengths and weights, standard errors and sample sizes, plus catches allocated to river of origin are presented in tabular form. Emergency order periods plus related catches and brood year tables are also presented.

KEY WORDS: Bristol Bay, salmon (*Oncorhynchus* sp.), biological sampling, catch, escapement.

## INTRODUCTION

This report summarizes the 1982 commercial catch and escapement statistics for the Bristol Bay sockeye (*Oncorhynchus nerka*), chinook (*O. tshawytscha*), chum salmon (*O. keta*), and pink salmon (*O. gorbuscha*) fisheries. There were no coho salmon (*O. kisutch*) samples for this year.

## METHODS AND MATERIALS

Personnel from the Alaska Department of Fish and Game (ADF&G), Division of Commercial Fisheries, collected the data and aged the scales from both the catch and escapement. Much of the data used in this report were collected by tower crews at escapement counting towers and catch samplers at selected canneries throughout Bristol Bay. Figure 1 shows the approximate location of these projects.

Salmon escapement enumeration crews collected sex and length data as well as scale samples for age determination with beach seines. On the Branch River where there was no counting tower, otolith samples for age determination were collected on the spawning grounds (Bill 1983). On the Branch River, the sockeye salmon sex composition was assumed to be 50% males.

Commercial catch samplers collected sex, length, and weight data as well as scale samples whenever the various districts were open to commercial fishing. Samplers obtained fish as they were unloaded from tenders and tried to spread their samples as uniformly as possible among the delivering tenders.

Sample sizes for both catch and escapement were based on statistical analysis of past sampling efforts which indicated that for sockeye and chinook salmon a 600-fish sample per sample period and for pink and chum salmon a 400-fish sample per sample period was required for the estimation of age and sex composition.

Sockeye escapements were counted from towers constructed on the banks of the Kvichak, Naknek, Egegik, Ugashik, Wood, Igushik, Nuyakuk, and Togiak Rivers. Salmon were counted for 10 minutes on each bank of the river every hour. These 10-minute counts were then expanded to estimate hourly escapements which were accumulated to determine the daily escapement. Sockeye escapements in the Branch, Snake, Nushagak, and Mulchatna Rivers plus several Togiak district systems as well as chinook and chum salmon escapements in the Nushagak and Togiak Districts were estimated through aerial surveys.

Final Bristol Bay harvest data were compiled from fish tickets by the Computer Services Section of the Division of Commercial Fisheries. Japanese mothership commercial catch of maturing and immature sockeye salmon of Bristol Bay origin were provided by Mike Dahlberg of the National Marine Fisheries Service, Auke Bay Laboratory, Auke Bay, Alaska 99821. Because most of the fish caught on the high seas have spent at least two years at sea, the immatures were allocated to the following year's three (i.e., 4<sub>1</sub>, 5<sub>2</sub>, 6<sub>3</sub>, and 7<sub>4</sub>) and four ocean

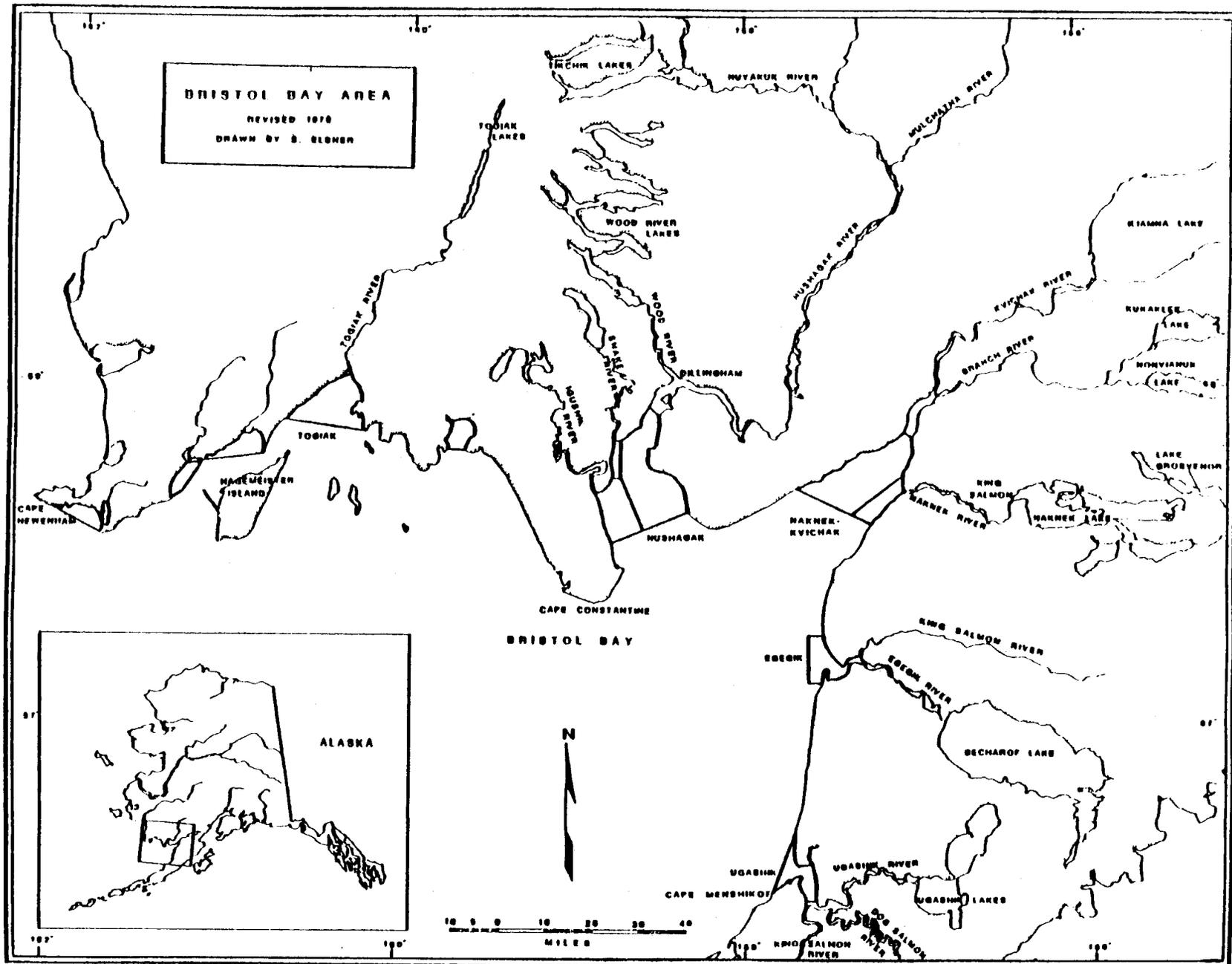


Figure 1. Bristol Bay major river systems and commercial fishing districts.

age groups (i.e.,  $5_1$ ,  $6_2$ ,  $7_3$ , and  $8_4$ ). Similarly, the matures were allocated to the same year of catch two (i.e.,  $3_1$ ,  $4_2$ ,  $5_3$ , and  $6_4$ ), three, and four ocean age groups. There were no allocation to the one ocean age groups (i.e.,  $3_2$ ,  $4_3$ , and  $5_4$ ). Age composition of the South Peninsula June sockeye fishery were provided by Doug Eggers of the Stock Biology Group of the Division of Commercial Fisheries. There were data available for 1969 through 1971, 1973, and from 1979 through 1982. For the years where the age composition of the South Peninsula catch were not available, the age composition of the total Bristol Bay returns were used instead.

Sockeye salmon caught in the Naknek-Kvichak and Nushagak Districts were from mixed river stocks and therefore had to be allocated to the various contributing river systems to determine each river's total return. Each age class was apportioned independently by applying the relative proportion of the escapement of that age class from the contributing river in question to the commercial catch of that age class.

The two digit age designation used in this report is the Gilbert/Rich method of representing salmon ages or a derivative thereof. The first digit represents the total age of the fish while the second digit represents the numbers of years of fresh water residence. Thus a  $5_3$  fish (5 subscript 3, 53, or 5(3) in the text, tables or appendices, respectively) is 5 years old, migrated to the ocean after spending 1 year in the stream, 2 years in the lake, and 2 years in the ocean. Similarly, a  $5_2$  fish is one that is 5 years old and spent 1 year in the stream, 1 year in the lake, and 3 years in the ocean.

Length measurements were from mid-eye to fork of tail and weights were round weights.

## RESULTS

Over 16% of the 1982 statewide harvest of salmon of all species were caught in Bristol Bay. Catch plus escapement of all species to Bristol Bay exceeded 22 million fish. The salmon fishing season began in late May and ended in early September.

Weekly fishing periods in Bristol Bay were from 9:00 a.m. Monday until 9:00 a.m. Saturday in all fishing districts except Togiak where it ended at 9:00 a.m. on Fridays unless modified by emergency order (Table 1).

### Sockeye Salmon

The sockeye salmon return, i.e., catch plus escapement, was over 22 million fish (Table 2). Sockeye salmon returns to Bristol Bay since 1960 have exhibited a five year cycle and 1982 was at the bottom of the cycle as expected. The majority of the run, 74%, were 3-ocean fish (Table 3). Most of the 3-ocean fish were in the  $5_2$  group from the 1977 escapement with the remainder in the  $6_3$  age group from the 1976 escapement (Tables 4 and 5). The 1975 escapement also produced some 2-ocean fish in the  $4_2$  and  $5_3$  age group which were 19 and 5% of the 1982 run, respectively.

Table 1. Bristol Bay emergency order fishing periods by district, 1982.

I. <u>Emergency Orders</u> <sup>1</sup>		Date and Time		Hours/Days Open
Number				
<u>NAKNEK-KVICHAK DISTRICT</u>				
AKN 02	June 23	9 a.m. - June 24	12 N	27 hrs.
AKN 03	June 24	12 N - June 25	12 N	24 hrs.
AKN 04	June 25	12 N - June 27	2 p.m.	50 hrs.
AKN 05	June 27	2 p.m. - June 28	2 p.m.	24 hrs.
AKN 06	June 28	2 p.m. - June 29	4 p.m.	26 hrs.
AKN 07	June 29	4 p.m. - June 30	6 p.m.	26 hrs.
AKN 08	June 30	6 p.m. - July 1	6 p.m.	24 hrs.
AKN 22	July 7	10 p.m. - July 8	10 p.m.	24 hrs.
<u>Naknek Section Only</u>				
AKN 09	July 1	6 p.m. - July 2	6 p.m.	24 hrs.
AKN 11	July 2	6 p.m. - July 3	7 p.m.	25 hrs.
AKN 13	July 3	7 p.m. - July 4	7 p.m.	24 hrs.
AKN 15	July 4	7 p.m. - July 5	10 p.m.	27 hrs.
AKN 16	July 5	10 p.m. - July 6	10 p.m.	24 hrs.
AKN 20	July 6	10 p.m. - July 7	10 p.m.	24 hrs.
AKN 24	July 8	10 p.m. - July 10	2 a.m.	28 hrs.
AKN 26	July 10	2 a.m. - July 17	9 a.m.	7 days, <sup>2</sup> 7 hrs.
AKN 30	July 15	9 a.m. - July 17	9 a.m.	48 hrs. <sup>2</sup>
AKN 32	July 19	9 a.m. - July 21	11 a.m.	50 hrs. <sup>3</sup>
<u>Kvichak Section Only</u>				
AKN 11	July 3	7 a.m. - July 3	7 p.m.	12 hrs.
AKN 18	July 6	10 p.m. - July 7	10 a.m.	12 hrs.
AKN 20	July 7	10 a.m. - July 7	10 p.m.	12 hrs.
AKN 32	July 19	9 a.m. - July 21	11 a.m.	50 hrs. <sup>4</sup>
<u>EGEGIK DISTRICT</u>				
AKN 01	June 11	12 N - Dec. 31	12 MN	-- <sup>5</sup>
AKN 02	June 23	9 a.m. - June 24	12 N	27 hrs.
AKN 03	June 24	12 N - June 25	12 N	24 hrs.
AKN 05	June 27	2 p.m. - June 28	2 p.m.	24 hrs.
AKN 06	June 28	2 p.m. - June 29	4 p.m.	26 hrs.
AKN 07	June 29	4 p.m. - June 30	6 p.m.	26 hrs.
AKN 10	July 2	6 a.m. - July 3	6 a.m.	24 hrs.
AKN 12	July 3	6 a.m. - July 3	6 p.m.	12 hrs.
AKN 17	July 6	10 a.m. - July 6	10 p.m.	12 hrs.
AKN 19	July 7	10 a.m. - July 8	11 a.m.	25 hrs.
AKN 21	July 7	3 p.m. - July 17	9 a.m.	9 days, 18 hrs.
AKN 31	July 17	9 a.m. - July 19	9 a.m.	48 hrs.

<sup>1</sup> Prefix code on emergency orders and Commissioner's announcements and general announcements indicate office where announcement originated ("AKN" for King Salmon, "DLG" for Dillingham, and "JUN" for Juneau).

<sup>2</sup> Fishing allowed with set gill nets only.

<sup>3</sup> Closed fishing to drift gill nets only.

<sup>4</sup> Closed fishing to all gear types.

<sup>5</sup> Clarifies location of the inner Egegik District boundary.

Table 1. Bristol Bay emergency order fishing periods by district, 1982  
(continued).

I. <u>Emergency Orders</u> <sup>1</sup>						
Number	Date and Time				Hours/Days Open	
<u>UGASHIK DISTRICT</u>						
AKN 02	June 23	9 a.m.	- June 24	12 N	27 hrs.	
AKN 03	June 24	12 N	- June 25	12 N	24 hrs.	
AKN 05	June 27	2 p.m.	- June 28	2 p.m.	24 hrs.	
AKN 06	June 28	2 p.m.	- June 29	4 p.m.	26 hrs.	
AKN 07	June 29	4 p.m.	- June 30	6 p.m.	26 hrs.	
AKN 10	July 2	6 a.m.	- July 3	6 a.m.	24 hrs.	
AKN 12	July 3	6 a.m.	- July 3	6 p.m.	12 hrs.	
AKN 14	July 3	6 p.m.	- July 4	8 p.m.	26 hrs.	
AKN 17	July 6	10 a.m.	- July 6	10 p.m.	12 hrs.	
AKN 19	July 7	10 a.m.	- July 8	11 a.m.	25 hrs.	
AKN 23	July 8	11 a.m.	- July 9	12 N	25 hrs.	
AKN 25	July 9	12 N	- July 10	1 p.m.	25 hrs.	
AKN 27	July 10	1 p.m.	- July 11	2 p.m.	25 hrs.	
AKN 28	July 11	2 p.m.	- July 12	2 p.m.	24 hrs.	
AKN 29	July 11	6 p.m.	- July 17	9 a.m.	5 days, 15 hrs.	
AKN 31	July 17	9 a.m.	- July 19	9 a.m.	48 hrs.	
<u>NUSHAGAK DISTRICT</u>						
DLG 01	June 18	12 N	- Sept. 30	MN	-- <sup>6</sup>	
DLG 03	June 23	1 p.m.	- June 24	1 p.m.	24 hrs.	
DLG 05	June 25	6 p.m.	- June 26	6 p.m.	24 hrs.	
DLG 06	June 26	6 p.m.	- June 28	6 p.m.	48 hrs.	
DLG 07	June 28	6 p.m.	- June 29	8 p.m.	26 hrs.	
DLG 08	June 29	8 p.m.	- June 30	8 p.m.	24 hrs.	
DLG 09	June 30	8 p.m.	- July 1	10 p.m.	26 hrs.	
DLG 10	July 1	10 p.m.	- July 2	10 p.m.	24 hrs.	
DLG 11	July 2	10 p.m.	- July 3	10 p.m.	24 hrs.	
DLG 12	July 3	10 p.m.	- July 4	10 p.m.	24 hrs.	
DLG 13	July 4	10 p.m.	- July 5	10 p.m.	24 hrs.	
DLG 14	July 5	10 p.m.	- July 6	10 p.m.	24 hrs.	
DLG 15	July 6	10 p.m.	- July 7	10 p.m.	24 hrs.	
DLG 16	July 7	10 p.m.	- July 19	9 a.m.	11 days, 11 hrs.	
DLG 19	July 24	9 a.m.	- July 26	9 a.m.	48 hrs.	
DLG 20	July 31	9 a.m.	- Aug. 2	9 a.m.	48 hrs.	
<u>Igushik Section Only</u>						
DLG 02	June 21	11 a.m.	- June 21	11 p.m.	12 hrs.	
DLG 04	June 24	1 p.m.	- June 25	6 p.m.	29 hrs.	
<u>TOGIK DISTRICT</u>						
DLG 01	June 18	12N	- Sept. 30	MN	-- <sup>7</sup>	
DLG 17	July 9	9 a.m.	- July 12	9 a.m.	3 days	
DLG 18	July 16	9 a.m.	- Aug. 6	9 a.m.	21 days	

<sup>6</sup> Restricts fishing south of the sockeye salmon boundary line, and redefines the boundary line.

<sup>7</sup> Establishes an inner fishing boundary limit near the mouth of the Kulukak River in the Kulukak section.

Table 2. Bristol Bay sockeye salmon inshore return by river system, 1982.

SYSTEM	CATCH	ESCAPEMENT	TOTAL RETURN
KVICHAK RIVER	1,858,475	1,134,840	2,993,315
BRANCH RIVER	532,854	239,300	772,154
NAKNEK RIVER	2,614,473	1,155,552	3,770,025
SUB-TOTAL NAKNEK-KVICHAK DISTRICT	5,005,802	2,529,692	7,535,494
EBEGIK RIVER	2,447,514	1,034,628	3,482,142
UGASHIK RIVER	1,139,192	1,157,526	2,296,718
WOOD RIVER	2,635,756	976,470	3,612,226
IBUSHIK RIVER	1,549,361	423,768	1,973,129
NUYAKLIK RIVER	1,731,070	537,864	2,268,934
SUB-TOTAL NUSHAGAK-IBUSHIK DISTRICT	5,916,187	1,938,102	7,854,289
TOGIK RIVER	595,696	288,674	884,370
GRAND TOTAL	15,104,391	6,948,622	22,053,013

Note: Does not include 52,570 spawners in Kulukak River, Lake, and Tithe Creek Ponds, 11,600 spawners in Snake Lake, and 63,000 spawners in the Nushagak and Mulchatna Rivers.

Table 3. Bristol Bay sockeye salmon inshore return by ocean age group and river system, 1982.

SYSTEM	OCEAN AGE GROUP				TOTAL
	1	2	3	4	
<b>KVICHAK RIVER</b>					
NUMBER	72,986	1,837,399	1,079,368	3,562	2,993,315
PERCENT	.33	8.33	4.89	.02	13.57
<b>BRANCH RIVER</b>					
NUMBER	3,111	92,427	676,616	0	772,154
PERCENT	.01	.42	3.07	.00	3.50
<b>NAKNEK RIVER</b>					
NUMBER	8,271	380,767	3,352,129	28,858	3,770,025
PERCENT	.04	1.73	15.20	.13	17.10
<b>SUB-TOTAL NAKNEK-KVICHAK DISTRICT</b>					
NUMBER	84,368	2,310,593	5,108,113	32,420	7,535,494
PERCENT	.38	10.48	23.16	.15	34.17
<b>EGEGIK RIVER</b>					
NUMBER	9,251	953,523	2,513,477	5,891	3,482,142
PERCENT	.04	4.32	11.40	.03	15.79
<b>UGASHIK RIVER</b>					
NUMBER	25,719	447,248	1,815,268	8,483	2,296,718
PERCENT	.12	2.03	8.23	.04	10.41
<b>WOOD RIVER</b>					
NUMBER	12,321	1,251,494	2,325,913	22,498	3,612,226
PERCENT	.06	5.67	10.55	.10	16.38
<b>IGUSHIK RIVER</b>					
NUMBER	0	100,707	1,834,146	38,276	1,973,129
PERCENT	.00	.46	8.32	.17	8.95
<b>NUYAKLIK RIVER</b>					
NUMBER	1,474	146,382	2,080,905	40,173	2,268,934
PERCENT	.01	.66	9.44	.18	10.29
<b>SUB-TOTAL NUSHAGAK-IGUSHIK DISTRICT</b>					
NUMBER	13,795	1,498,583	6,240,964	100,947	7,854,289
PERCENT	.06	6.80	28.30	.46	35.62
<b>TOSIAK RIVER</b>					
NUMBER	446	146,710	733,308	3,906	884,370
PERCENT	.00	.67	3.33	.02	4.01
<b>GRAND TOTAL</b>					
NUMBER	133,579	5,356,657	16,411,130	151,647	22,053,013
PERCENT	.61	24.29	74.42	.69	100.00

Note: Does not include: 52,570 spawners in Kulukak River, Lake, and Tithe Creek Ponds, 11,600 spawners in Snake Lake, and 63,000 spawners in the Nushagak and Mulchatna Rivers.

Table 4. Bristol Bay sockeye salmon inshore return by age group and river system, 1982.

RIVER SYSTEM	AGE GROUP												TOTAL
	31	32	41	42	43	51	52	53	62	63	73	74	
KVICHAK RIVER	1215	57011	0	1656410	15975	0	838867	179774	3562	240501	0	0	2993315
BRANCH RIVER	0	3111	0	92427	0	0	628051	0	0	48565	0	0	772154
NAKNEK RIVER	0	4421	0	298449	3850	0	2037759	82318	20622	1314370	8236	0	3770025
SUB-TOTAL NAKNEK-KVICHAK DISTRICT	1215	64543	0	2047286	19825	0	3504677	262092	24184	1603436	8236	0	7535494
----- EBEGIK RIVER	0	3334	1607	359320	5917	0	1765464	594203	3939	745444	1952	962	3482142
----- UGASHIK RIVER	0	19148	4747	219887	6571	0	1430655	227361	7111	379866	1372	0	2296718
----- WOOD RIVER	0	9738	0	1183786	2583	0	2078133	67708	22498	247780	0	0	3612226
IGUSHIK RIVER	0	0	0	84080	0	0	1629880	16627	38276	204266	0	0	1973129
MUYAKUK RIVER	0	1474	0	127598	0	587	1852608	18784	38999	228297	587	0	2268934
SUB-TOTAL NUSHAGAK-IGUSHIK DISTRICT	0	11212	0	1395464	2583	587	5560621	103119	99773	680343	587	0	7854289
----- TOGIAK RIVER	1727	446	6198	133417	0	0	581529	11566	3906	145581	0	0	884370
----- GRAND TOTAL	2942	98683	12552	4155374	34896	587	12842946	1198341	138913	3554670	12147	962	22053013

Note: Does not include: 52,570 spawners in Kulukak River, Lake, and Tithe Creek Ponds, 11,600 spawners in Snake Lake, and 63,000 spawners in the Nushagak and Mulchatna Rivers.

Table 5. Bristol Bay sockeye salmon inshore return (percent) by age group and river system, 1982.

RIVER SYSTEM	AGE GROUP												TOTAL
	31	32	41	42	43	51	52	53	62	63	73	74	
KVICHAK RIVER	.04	1.90	.00	55.34	.53	.00	28.02	6.01	.12	8.03	.00	.00	13.57
BRANCH RIVER	.00	.40	.00	11.97	.00	.00	81.34	.00	.00	6.29	.00	.00	3.50
NAKNEK RIVER	.00	.12	.00	7.92	.10	.00	54.05	2.18	.55	34.86	.22	.00	17.10
NAKNEK-KVICHAK DISTRICT	.02	.86	.00	27.17	.26	.00	46.51	3.48	.32	21.28	.11	.00	24.17
-----													
EBEGIK RIVER	.00	.10	.05	10.32	.17	.00	50.70	17.06	.11	21.41	.06	.03	15.79
-----													
UGASHIK RIVER	.00	.83	.21	9.57	.29	.00	62.29	9.90	.31	16.54	.06	.00	10.41
-----													
WOOD RIVER	.00	.27	.00	32.77	.07	.00	57.53	1.87	.62	6.86	.00	.00	16.38
IGUSHIK RIVER	.00	.00	.00	4.26	.00	.00	82.60	.84	1.94	10.35	.00	.00	8.95
NUYAKUK RIVER	.00	.06	.00	5.62	.00	.03	81.65	.83	1.72	10.06	.03	.00	10.29
NUSHAGAK-IGUSHIK DISTRICT	.00	.14	.00	17.77	.03	.01	70.80	1.31	1.27	8.66	.01	.00	35.62
-----													
TOGIK RIVER	.20	.05	.70	15.09	.00	.00	65.76	1.31	.44	16.46	.00	.00	4.01
-----													
GRAND TOTAL	.01	.45	.06	18.84	.16	.00	58.24	5.43	.63	16.12	.06	.00	100.00

Note: Does not include: 52,570 spawners in Kulukak River, Lake, and Tithe Creek Ponds, 11,600 spawners in Snake Lake, and 63,000 spawners in the Nushagak and Mulchatna Rivers.

The average sockeye salmon length was estimated to be 554.3 mm and the average weight was estimated to be 3.0 kg (Table 6). There were slightly more females (51%) than males (49%) in the total run.

Not included in these tables are the Japanese high seas mothership fishery harvest of Bristol Bay sockeye salmon. The renegotiation of the International North Pacific Fisheries Commission treaty, which first went into effect for the 1978 fishing season, continues to restrict by area and time the movements and fishing patterns of the Japanese land based and mothership fleet. This curtailment has markedly reduced high seas interceptions of Bristol Bay sockeye salmon. In 1982 the Japanese high seas mothership fleet caught only 63,000 mature sockeye salmon of Bristol Bay origin. The catch of immature Bristol Bay sockeye salmon in the spring of 1981 was only 380,000. Altogether, the 1981 immature and 1982 mature fish intercepted on the high seas was only 443,000 fish or less than 2% of the total 1982 Bay sockeye run. This level of interception is well below earlier levels when interceptions of several million salmon were common (Appendix Table 1). Nevertheless, sockeye salmon of Bristol Bay origin are still intercepted by the South Alaska Peninsula fishery. Their catches in 1982 were 2,101,800 (Appendix Table 2).

#### Chinook Salmon

The harvest of 254 thousand chinook salmon was the largest in Bristol Bay since records were first kept in 1893. Most of the chinook salmon harvested in Bristol Bay were caught in the Nushagak and Togiak Districts. Here, 229 thousand chinook salmon were caught which was more than double the 1962 to 1981 twenty-year average harvest of 91 thousand fish in those two districts. The escapement of 147 thousand chinook salmon in the Nushagak District was also more than twice the 1966 to 1981 sixteen-year average of 71 thousand spawners in this district.

#### Chum Salmon

The 1982 harvest of 921 thousand chum salmon was the sixth largest on record. Over 48% of the chum salmon harvest in the Nushagak District where the catch of 435 thousand harvest was nearly equal to the 1962 to 1981 twenty-year average of 402 thousand fish. Chum escapements were estimated in the Nushagak and Togiak Districts where over 65% of the harvest occurred. Escapements were estimated at 256 thousand and 86 thousand spawners for the Nushagak and Togiak Districts, respectively.

#### Pink Salmon

Over 1.4 million pink salmon were harvested in Bristol Bay, which was comparable to the 1962 to 1981 twenty-year average of 1.7 million. Most of the catch and escapement of pink salmon occurs in the Nushagak District (Table 7).

#### Naknek-Kvichak District

Nearly 94% of the 5.4 million Naknek-Kvichak District commercial salmon catch were sockeye salmon. Chum and pink salmon catches were 3.7 and 2.4% of the total district harvest, respectively (Table 8). There are three rivers drain-

Table 6. Bristol Bay sockeye salmon catch and escapement sex, age, length (mm), and weight (kg), 1982.

	AGE GROUP												TOTAL
	31	32	41	42	43	51	52	53	62	63	73	74	
MALE	1,967	90,418	8,244	2,020,725	27,563	587	6,103,542	567,013	81,832	1,853,684	6,484	0	10,778,059
PERCENT	.01	.41	.04	9.23	.13	.00	27.88	2.59	.37	8.54	.03	.00	49.24
AV LENGTH	443.97	347.62	555.25	513.92	390.55	470.00	577.53	539.53	602.94	592.29	612.67	.00	563.93
STD ERROR	7.00	.00	5.79	2.23	.00	.00	1.00	7.65	27.50	1.97	.00	.00	.06
SAMP SIZE	5	153	9	1,523	48	1	5,296	432	63	1,561	4	0	9,095
AV WEIGHT	2.99	.00	.00	2.34	.00	.00	3.51	2.63	3.15	3.61	.00	.00	3.26
STD ERROR	.00	.00	.00	.00	.00	.00	.09	.00	.00	.00	.00	.00	.00
SAMP SIZE	1	0	0	90	0	0	365	62	1	142	0	0	661
FEMALE	975	8,265	4,308	2,122,575	7,333	0	6,619,464	629,450	54,666	1,658,156	5,663	962	11,111,817
PERCENT	.00	.04	.02	9.70	.03	.00	30.24	2.88	.25	7.57	.03	.00	50.76
AV LENGTH	499.82	286.70	559.26	498.99	365.11	.00	555.85	523.64	573.74	563.58	564.20	516.00	544.97
STD ERROR	13.45	.00	8.71	1.86	.00	.00	1.00	19.83	3.50	2.63	.00	.00	.06
SAMP SIZE	4	11	16	2,051	13	0	5,773	583	40	1,374	5	1	9,871
AV WEIGHT	.00	.00	3.49	2.13	.00	.00	2.96	2.28	2.85	3.02	2.30	.00	2.81
STD ERROR	.00	.00	.00	.00	.00	.00	.07	.00	.00	.27	.00	.00	.00
SAMP SIZE	0	0	1	89	0	0	447	54	1	150	1	0	743
BOTH SEX	2,942	98,683	12,552	4,143,300	34,896	587	12,723,006	1,196,463	136,498	3,527,840	12,147	962	21,889,876
PERCENT	.01	.45	.06	18.93	.16	.00	58.12	5.47	.62	16.12	.06	.00	100.00
AV LENGTH	462.48	342.52	556.62	506.27	385.20	470.00	566.25	531.17	591.24	581.62	590.07	516.00	554.31
STD ERROR	8.54	.00	6.34	1.43	.00	.00	.71	12.28	13.86	1.58	.00	.00	.04
SAMP SIZE	9	164	25	3,574	61	1	11,069	1,015	103	2,935	9	1	18,966
AV WEIGHT	2.99	.00	3.49	2.25	.00	.00	3.22	2.46	2.89	3.33	2.30	.00	3.03
STD ERROR	.00	.00	.00	.00	.00	.00	.06	.00	.00	.20	.00	.00	.00
SAMP SIZE	1	0	1	179	0	0	812	116	2	292	1	0	1,404

Note: Does not include: 52,570 spawners in Kulukak River, Lake, and Tithe Creek Ponds, 11,600 spawners in Snake Lake, and 63,000 spawners in the Nushagak and Mulchatna Rivers, and 163,137 Igushik Beach setnet catch (Table 31).

Table 7. Bristol Bay pink salmon inshore return by river system, 1982.

SYSTEM	CATCH	ESCAPEMENT	TOTAL RETURN
KVICHAK RIVER			
BRANCH RIVER		50,000	
NAKNEK RIVER		34,000	
SUB-TOTAL			
NAKNEK-KVICHAK DISTRICT	127,560	84,000	211,560
EGEGIK RIVER	1,997	15,000	16,997
UGASHIK RIVER	170	6,000	6,170
WOOD RIVER DRAINAGE		36,100	
IGUSHIK RIVER		8,430	
NUYAKUK RIVER ABOVE COUNTING TOWER		1,537,716	
NUYAKUK RIVER BELOW COUNTING TOWER		54,380	
NUSHAGAK		19,130	
SNAKE		900	
SUB-TOTAL			
NUSHAGAK DISTRICT	1,339,272	1,656,656	2,995,928
TOGIAK RIVER		31,900	
OSVIAK RIVER		3,800	
MATOGAK RIVER		4,000	
SLUG RIVER		4,600	
SUB-TOTAL			
TOGIAK DISTRICT	23,417	44,300	67,717
TOTAL BRISTOL BAY	1,492,416	1,805,956	3,298,372

Table 8. Naknek-Kvichak District commercial salmon catch by species and fishing effort by gear type, 1982.

Period	Hours	Drift	Set	Sockeye	Chinook	Chum	Pink	Coho	Total
May 31	120				12				12
June 7	120			8	64				72
14	120			2,779	697	435			3,911
21	15	137		12,724	705	2,251			15,680
22	24	275		31,407	1,125	2,824			35,356
23	24	122		14,116	161	1,006			15,283
24	24	41		4,764	71	185			5,020
25	24	54		41,624	149	1,049			42,822
26	24	76		80,152	339	2,074			82,565
27	24	95		85,001	623	3,633			89,257
28	24	125		139,743	783	4,274			144,800
29	24	129		245,640	844	11,133			257,617
30	24	159		236,469	435	7,257			244,161
Jul 1 (1)	24	174		258,402	287	6,918			265,607
2 (2)	24	159		122,691	176	2,915			125,782
3 (3)	24	187		373,442	385	12,066			385,893
4 (2)	24	177		305,674	383	8,094			314,151
5 (2)	24	184		271,355	320	9,259			280,934
6 (4)	24	229		390,241	479	8,903			399,623
7	24	215		333,994	387	6,392			340,773
8 (5)	24	591		827,066	668	16,945			844,679
9 (2)	24	528		367,310	387	5,021			372,718
10 (2,6)	24	479		129,000	280	3,569	20		132,869
11 (2)	24	436		144,108	339	3,477	3		147,927
12 (2)	24	438		88,398	189	1,815			90,402
13 (2)	24	363		84,297	299	1,697	1		86,294
14 (2)	24	350		160,507	365	3,849	8		164,729
15 (2,7)	24	173		52,352	112	1,220	2		53,686
16 (2,8)	24			19,536	117	451	7		20,111
17 (2,8)	9			14,772	33	149	1		14,955
19 (8)	15			3,628	55	170	34		3,887
20 (8)	24			5,179	80	247	56		5,562
21	24			86,844	234	29,427	11,627	8	128,140
22	24	200		43,641	211	16,754	9,532	48	70,186
23	24	221		12,177	121	3,720	7,225	73	23,316
24	9	97		2,462	28	988	1,951	96	5,525
26	120	25		12,187	355	17,546	81,748	2,595	114,431
Aug 2	120			1,340	88	25	8,598	929	10,980
9	120			664	28	258	5,925	4,029	10,904
16	120			107	9	23	812	1,925	2,876
23	120			1	2		10	883	896
Total				5,005,802	12,425	198,019	127,560	10,586	5,354,392
Percent				93.49	0.23	3.70	2.38	0.20	100.00

footnotes: both Naknek and Kvichak section open unless noted below.

(1) Kvichak 24 hours. Naknek 1800 - 2400 h

(2) Naknek section only

(3) Kvichak 24 hours. Naknek 0001 - 0700 h, 1900 - 2400 h

(4) Naknek 24 hours. Kvichak 1000 - 2400 h

(5) Naknek 24 hours. Kvichak 0001 - 1000 h

(6) Kvichak 24 hours. Naknek 0200 - 2400 h

(7) set gill net only 0900 - 2400 h

(8) Naknek set gill net only.

ing into the Naknek-Kvichak District and this district's sockeye salmon inshore return, i.e., catch plus the escapement from the three rivers, added up to 7.5 million (Table 9). Sex, age, weight, and length data on the sockeye catch are presented in Table 10. Because there are three rivers draining into the Naknek-Kvichak District, the district catch was apportioned to each of the rivers to determine a total return by river. The Kvichak River apportioned catch of sockeye salmon was 1.9 million. Adding an escapement of 1.1 million to this apportioned catch lead to a Kvichak River total return of 3.0 million sockeye (Table 11). Daily escapement counts and the sex, age, and length statistics of the escapement are presented in Table 12 and 13, respectively.

The Branch River total return was 772 thousand from an apportioned catch of 533 thousand and an escapement of 239 thousand (Table 14). The Naknek River total run was 3.7 million from an apportioned catch of 2.6 million and an escapement of 1.1 million (Table 15). The Naknek River daily escapement counts and the sex, age, and length statistics of the escapement are presented in Table 16 and 17, respectively.

#### Egegik District

The Egegik District had a commercial salmon harvest of over 2.6 million fish of which 94% were sockeye salmon (Table 18). Chum and coho salmon catches were both 3% of the total district harvest. Daily escapement counts are presented in Table 19. Total return of catch plus escapement in this district was 3.5 million fish (Table 19). Sex, age, weight, and length data on the sockeye salmon catch are presented in Table 20. The Egegik River daily escapement counts and the sex, age, and length statistics of the escapement are presented in Table 21 and 22, respectively.

#### Ugashik District

The total commercial salmon catch in the Ugashik District was over 1.2 million fish with 91% of it being sockeye salmon (Table 23). Chum and coho salmon catches were both 4% of the total district catch. Total return of catch plus escapement was 2.3 million (Table 24). Sex, age, weight, and length data on the sockeye salmon catch are presented in Table 25. The Ugashik River daily escapement counts and the age, sex, and length statistics are presented in Table 26 and 27, respectively.

#### Nushagak-Igushik District

Over 8 million salmon of all species were harvested in the Nushagak-Igushik District. Sockeye and pink salmon were 72 and 16% of the catch, respectively (Table 28). Chum, coho, and chinook salmon catches were 5, 4, and 2% of the total harvest, respectively.

The Nushagak-Igushik District inshore run of sockeye salmon, i.e., catch plus the escapement from the six rivers was over 7.9 million fish (Table 29). The aerial survey estimate of 12 thousand spawners in the Snake River system was relatively small and appears as a footnote in Table 29. Sex, age, weight, and length data on the Nushagak-Igushik District catch, which does not include the

Table 9. Naknek-Kvichak District inshore return of sockeye salmon by age group and sex, 1982.

	AGE GROUP									TOTAL
	31	32	42	43	52	53	62	63	73	
MALES										
CATCH	0	0	719,561	0	1,140,762	81,173	5,683	553,664	3,160	2,504,003
ESCAPEMENT	1,215	57,190	338,920	15,177	502,330	50,517	4,811	256,744	0	1,226,904
TOTAL	1,215	57,190	058,481	15,177	1,643,092	131,690	10,494	810,408	3,160	3,730,907
PERCENT	.03	1.53	28.37	.41	44.04	3.53	.28	21.72	.08	100.00
FEMALES										
CATCH	0	0	524,980	0	1,323,342	68,534	8,843	573,259	2,841	2,501,799
ESCAPEMENT	0	7,353	463,825	4,648	538,243	61,868	4,847	219,769	2,235	1,302,788
TOTAL	0	7,353	988,805	4,648	1,861,585	130,402	13,690	793,028	5,076	3,804,587
PERCENT	.00	.19	25.99	.12	48.93	3.43	.36	20.84	.13	100.00
SEXES COMBINED										
CATCH	0	0	244,541	0	2,464,104	149,707	14,526	1,126,923	6,001	5,005,802
ESCAPEMENT	1,215	64,543	802,745	19,825	1,040,573	112,385	9,658	476,513	2,235	2,529,692
TOTAL	1,215	64,543	047,286	19,825	3,504,677	262,092	24,184	1,603,436	8,236	7,535,494
PERCENT	.02	.86	27.17	.26	46.51	3.48	.32	21.28	.11	100.00

Table 10. Naknek-Kvichak District commercial catch of sockeye salmon sex, age, length (mm), and weight (kg) by period, 1982.

SAMPLE PERIOD	AGE GROUP						TOTAL
	42	52	53	62	63	73	
1 6/ 7- 7/ 6							
MALES	458,157	521,349	44,236	0	278,054	3,160	1,304,956
PERCENT	17.51	19.93	1.69		10.63	.12	49.88
AV LENGTH	522.30	584.92	542.93		595.53	645.00	563.92
STD ERROR	2.07	1.97	7.53		2.95		1.27
SAMP SIZE	145	165	14	0	88	1	413
AV WEIGHT	2.30	3.38	2.56		3.51		3.02
STD ERROR	.09	.12	.19		.14		.07
SAMP SIZE	23	26	4	0	19	0	72
FEMALES	331,769	641,419	31,597	3,160	303,331	0	1,311,276
PERCENT	12.68	24.52	1.21	.12	11.59		50.12
AV LENGTH	519.24	566.95	528.60	585.00	571.96		555.16
STD ERROR	2.31	1.23	10.73		1.95		.99
SAMP SIZE	105	203	10	1	96	0	415
AV WEIGHT	2.25	2.92	2.63		2.89		2.77
STD ERROR	.07	.05	.31		.05		.03
SAMP SIZE	15	40	2	0	16	0	73
BOTH SEX	789,926	1,162,768	75,833	3,160	581,385	3,160	2,616,232
PERCENT	30.19	44.44	2.90	.12	22.22	.12	100.00
AV LENGTH	521.01	575.01	536.96	585.00	583.23	645.00	559.53
STD ERROR	1.54	1.12	6.27		1.74		.81
SAMP SIZE	250	368	24	1	184	1	828
AV WEIGHT	2.28	3.10	2.58		3.23		2.89
STD ERROR	.06	.06	.17		.08		.04
SAMP SIZE	38	66	6	0	35	0	145

-Continued-

Table 10. Naknek-Kvichak District commercial catch of sockeye salmon sex, age, length (mm), and weight (kg) by period, 1982 (continued).

	SAMPLE PERIOD 2 7/ 7- 8/21		AGE GROUP				TOTAL
	42	52	53	62	63	73	
MALES	261,404	613,413	36,937	5,683	275,610	0	1,199,047
PERCENT	10.94	25.92	1.55	.24	11.53		50.18
AV LENGTH	523.29	579.94	531.15	568.00	589.94		568.33
STD ERROR	2.77	1.61	9.91	15.00	2.24		1.19
SAMP SIZE	92	218	13	2	97	0	422
AV WEIGHT	2.24	3.35	2.29		3.53		3.11
STD ERROR	.13	.07	.16		.11		.05
SAMP SIZE	16	37	5	0	21	0	79
FEMALES	193,211	681,923	36,937	5,683	269,928	2,841	1,190,523
PERCENT	8.09	28.54	1.55	.24	11.30	.12	49.82
AV LENGTH	511.12	566.97	534.92	597.50	570.75	546.00	557.86
STD ERROR	3.15	1.12	7.26	26.50	1.67		.94
SAMP SIZE	68	240	13	2	95	1	419
AV WEIGHT	2.05	2.91	2.44		2.90	2.30	2.71
STD ERROR	.07	.05	.13		.05		.03
SAMP SIZE	18	48	3	0	18	1	88
BOTH SEX	454,615	1,301,336	73,874	11,366	545,538	2,841	2,389,570
PERCENT	19.02	54.46	3.09	.48	22.83	.12	100.00
AV LENGTH	518.12	573.14	533.04	582.75	580.44	546.00	563.12
STD ERROR	2.08	.96	6.14	15.23	1.40		.76
SAMP SIZE	160	458	26	4	192	1	841
AV WEIGHT	2.14	3.10	2.35		3.24	2.30	2.90
STD ERROR	.07	.04	.11		.06		.03
SAMP SIZE	34	85	8	0	39	1	167

-Continued-

Table 10. Naknek-Kvichak District commercial catch of sockeye salmon sex, age, length (mm), and weight (kg) by period, 1982 (continued).

ALL PERIODS COMBINED							
	AGE GROUP						
	42	52	53	62	63	73	TOTAL
MALES	719,561	1,140,762	81,173	5,683	553,664	3,160	2,504,003
PERCENT	14.37	22.79	1.62	.11	11.06	.06	50.02
AV LENGTH	522.66	582.22	537.57	568.00	592.75	645.00	566.03
STD ERROR	1.66	1.25	6.17	15.00	1.83		.87
SAMP SIZE	237	383	27	2	185	1	835
AV WEIGHT	2.28	3.36	2.44		3.52		3.06
STD ERROR	.07	.07	.12		.09		.04
SAMP SIZE	39	63	9	0	40	0	151
FEMALES	524,980	1,323,342	68,534	8,843	573,259	2,841	2,501,799
PERCENT	10.49	26.44	1.37	.18	11.45	.06	49.98
AV LENGTH	516.25	566.96	532.01	593.03	571.39	546.00	556.45
STD ERROR	1.87	.83	6.21	17.67	1.28		.68
SAMP SIZE	173	443	23	3	191	1	834
AV WEIGHT	2.18	2.91	2.53		2.89	2.30	2.74
STD ERROR	.05	.03	.15		.04		.02
SAMP SIZE	33	88	5	0	34	1	161
BOTH SEX	1,244,541	2,464,104	149,707	14,526	1,126,923	6,001	5,005,802
PERCENT	24.86	49.22	2.99	.29	22.51	.12	100.00
AV LENGTH	519.96	574.02	535.02	583.24	581.88	598.13	561.24
STD ERROR	1.24	.73	4.39	12.18	1.11		.55
SAMP SIZE	410	826	50	5	376	2	1,669
AV WEIGHT	2.24	3.12	2.48		3.20	2.30	2.90
STD ERROR	.05	.03	.09		.05		.02
SAMP SIZE	72	151	14	0	74	1	312

Table 11. Kvichak River apportioned catch and escapement of sockeye salmon by age group and sex, 1982.

	AGE GROUP								
	31	32	42	43	52	53	62	63	TOTAL
CATCH									
MALES									
NUMBER	0	0	543,461	0	300,802	44,821	404	107,979	997,467
PERCENT	.00	.00	29.24	.00	15.19	2.41	.02	5.81	53.67
FEMALES									
NUMBER	0	0	454,988	0	288,334	56,266	1,819	59,601	861,008
PERCENT	.00	.00	24.48	.00	15.51	3.03	.10	3.21	46.33
SEXES COMBINED									
NUMBER	0	0	998,449	0	589,136	101,087	2,223	167,580	1,858,475
PERCENT	.00	.00	53.72	.00	31.70	5.44	.12	9.02	100.00
ESCAPEMENT									
MALES									
NUMBER	1,215	55,064	255,975	14,606	132,457	27,894	342	50,072	537,625
PERCENT	.11	4.85	22.56	1.29	11.67	2.46	.03	4.41	47.37
FEMALES									
NUMBER	0	1,947	401,986	1,369	117,274	50,793	997	22,849	597,215
PERCENT	.00	.17	35.42	.12	10.33	4.48	.09	2.01	52.63
SEXES COMBINED									
NUMBER	1,215	57,011	657,961	15,975	249,731	78,687	1,339	72,921	1,134,840
PERCENT	.11	5.02	57.98	1.41	22.01	6.93	.12	6.43	100.00
CATCH AND ESCAPEMENT									
MALES									
NUMBER	1,215	55,064	799,436	14,606	433,259	72,715	746	158,051	1,535,092
PERCENT	.04	1.84	26.71	.49	14.47	2.43	.02	5.28	51.28
FEMALES									
NUMBER	0	1,947	856,974	1,369	405,608	107,059	2,816	82,450	1,458,223
PERCENT	.00	.07	28.63	.05	13.55	3.58	.09	2.75	48.72
SEXES COMBINED									
NUMBER	1,215	57,011	1,656,410	15,975	838,867	179,774	3,562	240,501	2,993,315
PERCENT	.04	1.90	55.34	.53	28.02	6.01	.12	8.03	100.00

Table 12. Kvichak River daily sockeye salmon escapement counts, 1982.

DATE	DAILY COUNT	ACCUMULATIVE COUNT	DAILY PERCENT OF TOTAL	ACCUMULATIVE PERCENT
JUNE 21	0	0	.00	.00
22	30	30	.00	.00
23	12	42	.00	.00
24	18	60	.00	.01
25	0	60	.00	.01
26	6	66	.00	.01
27	0	66	.00	.01
28	12	78	.00	.01
29	18	96	.00	.01
30	18	114	.00	.01
JULY 1	8,460	8,574	.75	.76
2	6,306	14,880	.56	1.31
3	1,398	16,278	.12	1.43
4	9,066	25,344	.80	2.23
5	5,658	31,002	.50	2.73
6	15,102	46,104	1.33	4.06
7	92,112	138,216	8.12	12.18
8	282,342	420,558	24.88	37.06
9	130,500	551,058	11.50	48.56
10	47,262	598,320	4.16	52.72
11	32,286	630,606	2.84	55.57
12	49,086	679,692	4.33	59.89
13	17,220	696,912	1.52	61.41
14	9,378	706,290	.83	62.24
15	6,738	713,028	.59	62.83
16	96,768	809,796	8.53	71.36
17	112,752	922,548	9.94	81.29
18	59,202	981,750	5.22	86.51
19	93,876	1,075,626	8.27	94.78
20	38,994	1,114,620	3.44	98.22
21	2,394	1,117,014	.21	98.43
22	1,734	1,118,748	.15	98.58
23	1,248	1,119,996	.11	98.69
24	3,576	1,123,572	.32	99.01
25	5,916	1,129,488	.52	99.53
26	4,392	1,133,880	.39	99.92
27	960	1,134,840	.08	100.00

Table 13. Kvichak River escapement of sockeye salmon sex, age, and length (mm) by period, 1982.

	SAMPLE PERIOD 1 7/ 4- 7/10								TOTAL
	AGE GROUP								
	31	32	42	43	52	53	62	63	
MALES	0	9,972	158,554	1,994	62,824	12,964	0	23,933	270,241
PERCENT		1.67	26.50	.33	10.50	2.17		4.00	45.17
AV LENGTH		337.40	525.38	422.50	582.62	543.23		590.42	537.61
STD ERROR		4.93	2.35	3.50	3.95	11.34		3.34	1.78
SAMP SIZE	0	10	159	2	63	13	0	24	271
FEMALES	0	997	220,381	0	67,810	27,922	997	9,972	328,079
PERCENT		.17	36.83		11.33	4.67	.17	1.67	54.83
AV LENGTH		430.00	505.69		562.46	525.18	588.00	580.60	521.38
STD ERROR			1.83		3.38	4.31		6.17	1.48
SAMP SIZE	0	1	221	0	68	28	1	10	329
BOTH SEX	0	10,969	378,935	1,994	130,634	40,886	997	33,905	598,320
PERCENT		1.83	63.33	.33	21.83	6.83	.17	5.67	100.00
AV LENGTH		345.82	513.93	422.50	572.16	530.90	588.00	587.53	528.71
STD ERROR		4.93	1.45	3.50	2.58	4.65		2.97	1.14
SAMP SIZE	0	11	380	2	131	41	1	34	600

-Continued-

Table 13. Kvichak River escapement of sockeye salmon sex, age, and length (mm) by period, 1982 (continued).

	SAMPLE PERIOD 2 7/11- 7/16								TOTAL
	31	32	42	AGE GROUP			62	63	
				43	52	53			
MALES	0	14,714	45,171	4,106	22,243	5,817	342	10,950	103,343
PERCENT		6.96	21.36	1.94	10.52	2.75	.16	5.18	48.87
AV LENGTH		339.19	513.14	370.58	585.91	527.41	615.00	594.47	508.13
STD ERROR		5.43	2.48	7.52	3.66	7.19		4.68	1.71
SAMP SIZE	0	43	132	12	65	17	1	32	302
FEMALES	0	342	75,283	1,369	18,478	8,897	0	3,764	108,133
PERCENT		.16	35.60	.65	8.74	4.21		1.78	51.13
AV LENGTH		410.00	502.80	401.00	555.56	511.19		574.64	513.42
STD ERROR			1.75	28.53	4.20	6.59		7.09	1.58
SAMP SIZE	0	1	220	4	54	26	0	11	316
BOTH SEX	0	15,056	120,454	5,475	40,721	14,714	342	14,714	211,476
PERCENT		7.12	56.96	2.59	19.26	6.96	.16	6.96	100.00
AV LENGTH		340.80	506.68	378.18	572.14	517.60	615.00	589.40	510.84
STD ERROR		5.43	1.44	9.09	2.76	4.90		3.92	1.16
SAMP SIZE	0	44	352	16	119	43	1	43	618

-Continued-

Table 13. Kvichak River escapement of sockeye salmon sex, age, and length (mm) by period, 1982 (continued).

SAMPLE PERIOD	3 7/17- 7/20								TOTAL
	AGE GROUP								
	31	32	42	43	52	53	62	63	
MALES	1,215	30,378	52,250	8,506	47,390	9,113	0	15,189	164,041
PERCENT	.37	9.35	16.07	2.62	14.58	2.80		4.67	50.47
AV LENGTH	397.50	338.30	521.49	376.36	581.69	540.27		593.84	504.26
STD ERROR	51.50	3.90	2.69	9.32	2.91	3.81		5.81	1.64
SAMP SIZE	2	50	86	14	78	15	0	25	270
FEMALES	0	608	106,322	0	30,986	13,974	0	9,113	161,003
PERCENT		.19	32.71		9.53	4.30		2.80	49.53
AV LENGTH		390.00	506.63		564.55	524.65		573.27	522.67
STD ERROR			1.75		3.08	4.93		4.71	1.40
SAMP SIZE	0	1	175	0	51	23	0	15	265
BOTH SEX	1,215	30,986	158,572	8,506	78,376	23,087	0	24,302	325,044
PERCENT	.37	9.53	48.78	2.62	24.11	7.10		7.48	100.00
AV LENGTH	397.50	339.31	511.53	376.36	574.91	530.82		586.13	513.38
STD ERROR	51.50	3.90	1.47	9.32	2.14	3.34		4.04	1.08
SAMP SIZE	2	51	261	14	129	38	0	40	535

-Continued-

Table 13. Kvichak River escapement of sockeye salmon sex, age, and length (mm) by period, 1983 (continued).

ALL PERIODS COMBINED									
	AGE GROUP								TOTAL
	31	32	42	43	52	53	62	63	
MALES	1,215	55,064	255,975	14,606	132,457	27,894	342	50,072	537,625
PERCENT	.11	4.85	22.56	1.29	11.67	2.46	.03	4.41	47.37
AV LENGTH	397.50	338.37	522.43	381.03	582.84	538.96	615.00	592.34	521.76
STD ERROR	51.50	2.99	1.45	5.67	2.00	4.44		2.76	.99
SAMP SIZE	2	103	377	28	206	45	1	81	843
FEMALES	0	1,947	401,986	1,369	117,274	50,793	997	22,849	597,215
PERCENT		.17	35.42	.12	10.33	4.48	.09	2.01	52.63
AV LENGTH		414.00	505.40	401.00	561.93	522.58	588.00	576.69	520.29
STD ERROR			1.03	28.53	2.08	3.09		3.39	.86
SAMP SIZE	0	3	616	4	173	77	1	36	910
BOTH SEX	1,215	57,011	657,961	15,975	249,731	78,687	1,339	72,921	1,134,840
PERCENT	.11	5.02	57.98	1.41	22.01	6.93	.12	6.43	100.00
AV LENGTH	397.50	340.96	512.02	382.75	573.02	528.39	594.90	587.44	520.99
STD ERROR	51.50	2.91	.85	6.11	1.44	2.55		2.18	.65
SAMP SIZE	2	106	993	32	379	122	2	117	1,753

Table 14. Branch River apportioned catch and escapement of sockeye salmon by age group and sex, 1982.

	AGE GROUP				TOTAL
	32	42	52	63	
CATCH					
MALES					
NUMBER	0	37,343	211,940	15,481	264,764
PERCENT	.00	7.01	39.77	2.91	49.69
FEMALES					
NUMBER	0	19,907	229,457	18,726	268,090
PERCENT	.00	3.74	43.06	3.51	50.31
SEXES COMBINED					
NUMBER	0	57,250	441,397	34,207	532,854
PERCENT	.00	10.74	82.84	6.42	100.00
ESCAPEMENT					
MALES					
NUMBER	1,555	17,589	93,327	7,179	119,650
PERCENT	.65	7.35	39.00	3.00	50.00
FEMALES					
NUMBER	1,556	17,588	93,327	7,179	119,650
PERCENT	.65	7.35	39.00	3.00	50.00
SEXES COMBINED					
NUMBER	3,111	35,177	186,654	14,358	239,300
PERCENT	1.30	14.70	78.00	6.00	100.00
CATCH AND ESCAPEMENT					
MALES					
NUMBER	1,555	54,932	305,267	22,660	384,414
PERCENT	.20	7.11	39.53	2.93	49.78
FEMALES					
NUMBER	1,556	37,495	322,784	25,905	387,740
PERCENT	.20	4.86	41.80	3.35	50.22
SEXES COMBINED					
NUMBER	3,111	92,427	628,051	48,565	772,154
PERCENT	.40	11.97	81.34	6.29	100.00

Table 15. Naknek River apportioned catch and escapement of sockeye salmon by age group and sex, 1982.

	AGE GROUP								TOTAL
	32	42	43	52	53	62	63	73	
CATCH									
MALES									
NUMBER	0	138,757	0	628,020	36,352	5,279	430,203	3,160	1,241,771
PERCENT	.00	5.31	.00	24.02	1.39	.20	16.45	.12	47.50
FEMALES									
NUMBER	0	50,085	0	805,551	12,268	7,024	494,933	2,841	1,372,702
PERCENT	.00	1.92	.00	30.81	.47	.27	18.93	.11	52.50
SEXES COMBINED									
NUMBER	0	188,842	0	1,433,571	48,620	12,303	925,136	6,001	2,614,473
PERCENT	.00	7.22	.00	54.83	1.86	.47	35.39	.23	100.00
ESCAPEMENT									
MALES									
NUMBER	571	65,356	571	276,546	22,623	4,469	199,493	0	569,629
PERCENT	.05	5.66	.05	23.93	1.96	.39	17.26	.00	49.29
FEMALES									
NUMBER	3,850	44,251	3,279	327,642	11,075	3,850	189,741	2,235	585,923
PERCENT	.33	3.83	.28	28.35	.96	.33	16.42	.19	50.71
SEXES COMBINED									
NUMBER	4,421	109,607	3,850	604,188	33,698	8,319	389,234	2,235	1,155,552
PERCENT	.38	9.49	.33	52.29	2.92	.72	33.68	.19	100.00
CATCH AND ESCAPEMENT									
MALES									
NUMBER	571	204,113	571	904,566	58,975	9,748	629,696	3,160	1,811,400
PERCENT	.02	5.41	.02	23.99	1.56	.26	16.70	.08	48.05
FEMALES									
NUMBER	3,850	94,336	3,279	1,133,193	23,343	10,874	684,674	5,076	1,958,625
PERCENT	.10	2.50	.09	30.06	.62	.29	18.16	.13	51.95
SEXES COMBINED									
NUMBER	4,421	298,449	3,850	2,037,759	82,318	20,622	1,314,370	8,236	3,770,025
PERCENT	.12	7.92	.10	54.05	2.18	.55	34.86	.22	100.00

Table 16. Naknek River daily sockeye salmon escapement counts, 1982.

DATE	DAILY COUNT	CUMULATIVE COUNT	DAILY % OF TOTAL	ACCUMULATIVE PERCENT
JUNE 19	36	36	.00	.00
20	6	42	.00	.00
21	744	786	.06	.07
22	120	906	.01	.08
23	0	906	0.00	.08
24	6	912	.00	.08
25	24	936	.00	.08
26	18	954	.00	.08
27	798	1,752	.07	.15
28	4,800	6,552	.42	.57
29	43,440	49,992	3.76	4.33
30	246,114	296,106	21.30	25.62
JULY 1	33,618	329,724	2.91	28.53
2	7,038	336,762	.61	29.14
3	30,840	367,602	2.67	31.81
4	214,350	581,952	18.55	50.36
5	117,498	699,450	10.17	60.53
6	46,746	746,196	4.05	64.57
7	50,442	796,638	4.37	68.94
8	83,070	879,708	7.19	76.13
9	74,010	953,718	6.40	82.53
10	34,578	988,296	2.99	85.53
11	5,616	993,912	.49	86.01
12	9,156	1,003,068	.79	86.80
13	3,348	1,006,416	.29	87.09
14	2,760	1,009,176	.24	87.33
15	10,770	1,019,946	.93	88.26
16	6,594	1,026,540	.57	88.84
17	83,004	1,109,544	7.18	96.02
18	19,452	1,128,996	1.68	97.70
19	5,166	1,134,162	.45	98.15
20	8,016	1,142,178	.69	98.84
21	2,592	1,144,770	.22	99.07
22	9,096	1,153,866	.79	99.85
23	1,686	1,155,552	.15	100.00

Table 17. Naknek River escapement of sockeye salmon sex, age, and length (mm) by period, 1982.

ALL PERIODS COMBINED									
	AGE GROUP								
	32	42	43	52	53	62	63	73	TOTAL
MALES	571	65,356	571	276,546	22,623	4,469	199,493	0	563,629
PERCENT	.05	5.66	.05	23.93	1.96	.39	17.26		49.29
AV LENGTH	335.00	474.79	418.00	584.50	505.98	611.28	591.99		571.21
STD ERROR		4.93		1.28	9.24	5.38	1.54		1.06
SAMP SIZE	1	77	1	329	25	6	237	0	676
FEMALES	3,850	44,251	3,279	327,642	11,075	3,850	189,741	2,235	585,923
PERCENT	.33	3.83	.28	28.35	.96	.33	16.42	.19	50.71
AV LENGTH	317.12	482.13	319.70	562.51	521.78	593.07	568.76	586.60	555.01
STD ERROR	4.03	4.47	2.31	.98	10.44	7.75	1.23	5.00	.78
SAMP SIZE	4	51	3	392	13	4	219	3	689
BOTH SEX	4,421	109,607	3,850	604,188	33,698	8,319	389,234	2,235	1,155,552
PERCENT	.38	9.49	.33	52.29	2.92	.72	33.68	.19	100.00
AV LENGTH	319.43	477.75	334.28	572.57	511.18	602.85	580.66	586.60	563.00
STD ERROR	3.22	3.46	1.73	.79	7.05	4.48	1.00	5.00	.66
SAMP SIZE	5	128	4	721	38	10	456	3	1,365

Table 18. Egegik District commercial salmon catch by species and fishing effort by gear type, 1982.

Period	Hours	Drift	Set	Sockeye	Chinook	Chum	Pink	Coho	Total
June 7	15	3		9	9	6			24
8	24	1		133	19	34			186
9	24	4		227	12	83			322
10	24	6		219	62	161			442
11	24	8		170	107	284			561
12	9	5		112	72	107			291
14	15	12		979	88	156			1,223
15	24	22		1,608	163	381			2,152
16	24	24		2,910	164	591			3,665
17	24	55		12,505	268	884			13,657
18	24	66		17,515	422	1,261			19,198
19	9	57		21,238	236	1,605			23,079
21	15	88		15,704	369	958			17,031
22	24	178		28,945	262	1,776			30,983
23	24	136		23,899	319	1,772			25,990
24	24	139		41,943	397	2,388			44,728
25	12	147		73,461	404	2,089			75,954
27	10	88		50,552	151	1,898			52,601
28	24	144		149,087	187	4,007			153,281
29	24	117		106,171	213	2,685			109,069
30	18	134		119,413	202	2,130			121,745
July 2	18	91		53,901	66	743			54,710
3	18	120		88,183	158	2,072			90,413
6	14	102		231,439	33	1,385			232,857
7	24	142		504,704	60	9,250			514,014
8	24	204		359,784	57	6,604			366,445
9	24	178		153,465	65	5,725			159,255
10	24	133		86,726	62	3,775			90,563
11	24	142		75,229	26	4,967			80,222
12	24	173		65,945	41	3,535		1	69,522
13	24	141		36,579	38	3,745			40,362
14	24	122		32,742	11	1,287			34,040
15	24	80		21,645	18	702		1	22,366
16	24	43		16,561	12	1,424			17,997
17	24	60		17,357	10	1,893			19,260
18	24	59		16,491		2,153			18,644
19	24	40		7,848	2	2,370		16	10,236
20	24	42		6,857	7	2,057		10	8,931
21	24	17		2,584	7	602		10	3,203
22	24	3		611	1	181	1	17	811
23	24	1		575		237	2	34	848
24	9	1		210	2	104	6		322
26	15	1		169		144	9	120	442
27	24	1		229	5	299	32	295	860
28	24	1		177	3	321	32	295	828
29	24	4		104	1	388	93	459	1,045
30	24	2		71	4	476	122	870	1,543
31	24	1		20	1	183	44	294	542
Aug 2	15	10		91	3	607	230	2,264	3,195
24	24	13		113	5	451	182	2,222	2,973
24	24	14		60	1	257	257	2,531	3,106
24	24	20		67		260	248	3,371	3,946
6	24	18		51	3	213	183	3,076	3,526
7	9	11		23		123	68	1,618	1,832
9	120			74	4	407	372	17,301	18,158
16	120			24	2	117	94	20,691	20,928
23	120			5		15	18	11,520	11,558
30	120					1	4	6,696	6,701
Sept 6	120							818	818
13	120							424	424
20	120							35	35
Total				2,447,514	4,834	84,329	1,997	74,989	2,613,663
Percent				93.64	0.18	3.23	0.08	2.87	100.00

Table 19. Egegik River catch and escapement of sockeye salmon by age group and sex, 1982.

	AGE GROUP										
	32	41	42	43	52	53	62	63	73	74	TOTAL
CATCH											
MALES											
NUMBER	994	1,607	100,183	0	524,463	182,330	3,594	248,180	1,607	0	1,062,958
PERCENT	.04	.07	4.09	.00	21.43	7.45	.15	10.14	.07	.00	43.43
FEMALES											
NUMBER	0	0	130,872	0	713,534	245,762	0	294,388	0	0	1,384,556
PERCENT	.00	.00	5.35	.00	29.15	10.04	.00	12.03	.00	.00	56.57
SEXES COMBINED											
NUMBER	994	1,607	231,055	0	1,237,997	428,092	3,594	542,568	1,607	0	2,447,514
PERCENT	.04	.07	9.44	.00	50.58	17.49	.15	22.17	.07	.00	100.00
ESCAPEMENT											
MALES											
NUMBER	1,651	0	51,924	3,232	239,068	71,387	0	116,397	345	0	484,004
PERCENT	.16	.00	5.02	.31	23.11	6.90	.00	11.25	.03	.00	46.78
FEMALES											
NUMBER	689	0	76,341	2,685	288,399	94,724	345	86,479	0	962	550,624
PERCENT	.07	.00	7.38	.26	27.87	9.16	.03	8.36	.00	.09	53.22
SEXES COMBINED											
NUMBER	2,340	0	128,265	5,917	527,467	166,111	345	202,876	345	962	1,034,628
PERCENT	.23	.00	12.40	.57	50.98	16.06	.03	19.61	.03	.09	100.00
CATCH AND ESCAPEMENT											
MALES											
NUMBER	2,645	1,607	152,107	3,232	763,531	253,717	3,594	364,577	1,952	0	1,546,962
PERCENT	.08	.05	4.37	.09	21.93	7.29	.10	10.47	.06	.00	44.43
FEMALES											
NUMBER	689	0	207,213	2,685	1,001,933	340,486	345	380,867	0	962	1,935,180
PERCENT	.02	.00	5.95	.08	28.77	9.78	.01	10.94	.00	.03	55.57
SEXES COMBINED											
NUMBER	3,334	1,607	359,320	5,917	1,765,464	594,203	3,939	745,444	1,952	962	3,482,142
PERCENT	.10	.05	10.32	.17	50.70	17.06	.11	21.41	.06	.03	100.00

Table 20. Egegik District commercial catch of sockeye salmon sex, age, length (mm), and weight (kg) by period, 1986.

	SAMPLE PERIOD 1 6/25- 7/ 3		AGE GROUP						TOTAL
	32	41	42	52	53	62	63	73	
MALES	994	0	40,742	217,624	58,629	1,987	79,497	0	399,473
PERCENT	.12		5.04	26.90	7.25	.25	9.83		49.39
AV LENGTH	490.00		542.34	592.21	550.53	584.00	601.80		582.62
STD ERROR			4.85	1.51	2.96	14.00	2.42		1.16
SAMP SIZE	1	0	41	219	59	2	80	0	402
AV WEIGHT			2.85	3.50	2.77	3.15	3.73		3.34
STD ERROR			.14	.06	.10		.09		.04
SAMP SIZE	0	0	20	56	18	1	30	0	125
FEMALES	0	0	24,843	265,322	41,736	0	77,510	0	409,411
PERCENT			3.07	32.80	5.16		9.58		50.61
AV LENGTH			529.92	574.64	533.71		579.97		568.76
STD ERROR			3.58	1.03	3.11		1.98		.85
SAMP SIZE	0	0	25	267	42	0	78	0	412
AV WEIGHT			2.51	3.00	2.31		3.04		2.91
STD ERROR			.14	.03	.09		.07		.03
SAMP SIZE	0	0	10	85	13	0	32	0	140
BOTH SEX	994	0	65,585	482,946	100,365	1,987	157,007	0	808,884
PERCENT	.12		8.11	59.71	12.41	.25	19.41		100.00
AV LENGTH	490.00		537.64	582.56	543.54	584.00	591.02		575.61
STD ERROR			3.30	.88	2.16	14.00	1.57		.72
SAMP SIZE	1	0	66	486	101	2	158	0	814
AV WEIGHT			2.74	3.20	2.58	3.15	3.37		3.11
STD ERROR			.10	.03	.07		.05		.03
SAMP SIZE	0	0	30	141	31	1	62	0	265

-Continued-

Table 20. Egegik District commercial catch of sockeye salmon sex, age, length (mm), and weight (kg) by period, 1982 (continued).

	SAMPLE PERIOD 2 7/4-7/14								TOTAL
	AGE GROUP								
	32	41	42	52	53	62	63	73	
MALES	0	1,607	59,441	306,839	123,701	1,607	168,683	1,607	663,485
PERCENT		.10	3.63	18.73	7.55	.10	10.29	.10	40.49
AV LENGTH		584.00	530.14	593.84	542.73	632.00	595.80	585.00	579.15
STD ERROR			3.09	1.68	2.11		2.23		1.08
SAMP SIZE	0	1	37	191	77	1	105	1	413
AV WEIGHT			2.49	3.57	2.65		3.52		3.31
STD ERROR			.13	.06	.04		.08		.04
SAMP SIZE	0	0	6	62	30	0	40	0	138
FEMALES	0	0	106,029	448,212	204,026	0	216,878	0	975,145
PERCENT			6.47	27.35	12.45		13.24		59.51
AV LENGTH			516.97	575.08	524.36		577.90		558.78
STD ERROR			2.72	.97	1.58		1.55		.72
SAMP SIZE	0	0	66	279	127	0	135	0	607
AV WEIGHT			2.15	3.01	2.22		3.03		2.78
STD ERROR			.08	.03	.05		.05		.02
SAMP SIZE	0	0	19	84	33	0	44	0	180
BOTH SEX	0	1,607	165,470	755,051	327,727	1,607	385,561	1,607	1,638,630
PERCENT		.10	10.10	46.08	20.00	.10	23.53	.10	100.00
AV LENGTH		584.00	521.70	582.70	531.29	632.00	585.73	585.00	567.03
STD ERROR			2.07	.89	1.27		1.31		.61
SAMP SIZE	0	1	103	470	204	1	240	1	1,020
AV WEIGHT			2.23	3.25	2.42		3.26		3.01
STD ERROR			.07	.03	.03		.05		.02
SAMP SIZE	0	0	25	146	63	0	84	0	318

-Continued-

Table 20. Egegik District commercial catch of sockeye salmon sex, age, length (mm), and weight (kg) by period, 1982 (continued).

ALL PERIODS COMBINED									
	AGE GROUP								
	32	41	42	52	53	62	63	73	TOTAL
MALES	994	1,607	100,183	524,463	182,330	3,594	248,180	1,607	1,062,958
PERCENT	.04	.07	4.09	21.43	7.45	.15	10.14	.07	43.43
AV LENGTH	490.00	584.00	535.10	593.16	545.24	605.46	597.72	585.00	580.45
STD ERROR			2.94	1.12	1.75	9.33	1.64		.79
SAMP SIZE	1	1	78	410	136	3	185	1	815
AV WEIGHT			2.64	3.54	2.69	3.15	3.59		3.32
STD ERROR			.11	.04	.04		.06		.03
SAMP SIZE	0	0	26	118	48	1	70	0	263
FEMALES	0	0	130,872	713,534	245,762	0	294,388	0	1,384,556
PERCENT			5.35	29.15	10.04		12.03		56.57
AV LENGTH			519.43	574.92	525.95		578.45		561.73
STD ERROR			2.21	.70	1.42		1.22		.55
SAMP SIZE	0	0	91	546	169	0	213	0	1,019
AV WEIGHT			2.22	3.01	2.24		3.03		2.80
STD ERROR			.07	.02	.04		.04		.02
SAMP SIZE	0	0	29	169	46	0	76	0	320
BOTH SEX	994	1,607	231,055	1,237,997	428,092	3,594	542,568	1,607	2,447,514
PERCENT	.04	.07	9.44	50.58	17.49	.15	22.17	.07	100.00
AV LENGTH	490.00	584.00	526.22	582.65	534.16	605.46	587.26	585.00	569.86
STD ERROR			1.80	.63	1.11	9.33	1.01		.47
SAMP SIZE	1	1	169	956	305	3	398	1	1,834
AV WEIGHT			2.40	3.23	2.43	3.15	3.29		3.02
STD ERROR			.07	.02	.03		.03		.02
SAMP SIZE	0	0	55	287	94	1	146	0	583

Table 21. Egegik River daily sockeye salmon escapement counts, 1982.

DATE	DAILY COUNT	ACCUMULATIVE COUNT	DAILY PERCENT OF TOTAL	ACCUMULATIVE PERCENT
JUNE 20	0	0	.00	.00
21	24	24	.00	.00
22	180	204	.02	.02
23	24	228	.00	.02
24	54	282	.01	.03
25	6	288	.00	.03
26	6	294	.00	.03
27	0	294	.00	.03
28	648	942	.06	.09
29	720	1,662	.07	.16
30	234	1,896	.02	.18
JULY 1	1,920	3,816	.19	.37
2	20,214	24,030	1.95	2.32
3	-12	24,018	.00	2.32
4	7,206	31,224	.70	3.02
5	39,198	70,422	3.79	6.81
6	30,042	100,464	2.90	9.71
7	51,516	151,980	4.98	14.69
8	99,258	251,238	9.59	24.28
9	143,424	394,662	13.86	38.15
10	184,158	578,820	17.80	55.94
11	151,122	729,942	14.61	70.55
12	137,766	867,708	13.32	83.87
13	98,736	966,444	9.54	93.41
14	49,746	1,016,190	4.81	98.22
15	13,494	1,029,684	1.30	99.52
16	1,128	1,030,812	.11	99.63
17	1,470	1,032,282	.14	99.77
18	558	1,032,840	.05	99.83
19	870	1,033,710	.08	99.91
20	918	1,034,628	.09	100.00

Table 22. Egegik River escapement of sockeye salmon sex, age, and length (mm) by period, 1982.

SAMPLE PERIOD	1 6/30- 7/ 8									
	AGE GROUP									
	32	42	43	52	53	62	63	73	74	TOTAL
MALES	689	8,616	345	70,649	11,718	0	31,706	345	0	124,068
PERCENT	.27	3.43	.14	28.12	4.66		12.62	.14		49.38
AV LENGTH	400.00	533.88	395.00	594.37	539.26		603.39	631.00		585.74
STD ERROR	20.00	6.14		1.64	3.72		2.30			1.25
SAMP SIZE	2	25	1	205	34	0	92	1	0	360
FEMALES	689	13,785	1,723	60,311	24,469	345	25,848	0	0	127,170
PERCENT	.27	5.49	.69	24.01	9.74	.14	10.29			50.62
AV LENGTH	370.00	514.00	408.00	573.69	515.90	610.00	575.12			553.14
STD ERROR	40.00	4.38	14.24	1.36	3.24		2.26			1.15
SAMP SIZE	2	40	5	175	71	1	75	0	0	369
BOTH SEX	1,378	22,401	2,068	130,960	36,187	345	57,554	345	0	251,238
PERCENT	.55	8.92	.82	52.13	14.40	.14	22.91	.14		100.00
AV LENGTH	385.00	521.65	405.83	584.85	523.46	610.00	590.69	631.00		569.24
STD ERROR	22.36	3.58	14.24	1.08	2.50		1.62			.85
SAMP SIZE	4	65	6	380	105	1	167	1	0	729

-Continued-

Table 22. Egegik River escapement of sockeye salmon sex, age, and length (mm) by period, 1982 (continued).

	SAMPLE PERIOD 2 7/ 9- 7/15									
	32	42	43	AGE GROUP		62	63	73	74	TOTAL
				52	53					
MALES	962	43,308	2,887	168,419	59,669	0	84,691	0	0	359,936
PERCENT	.12	5.53	.37	21.50	7.62		10.81			45.95
AV LENGTH	382.00	520.87	409.33	589.55	531.76		597.11			571.48
STD ERROR		3.82	.66	1.68	2.62		1.70			1.09
SAMP SIZE	1	45	3	175	62	0	88	0	0	374
FEMALES	0	62,556	962	228,088	70,255	0	60,631	0	962	423,454
PERCENT		7.99	.12	29.12	8.97		7.74		.12	54.05
AV LENGTH		504.66	392.00	563.65	507.59		570.14		516.00	546.07
STD ERROR		2.70		1.16	2.61		2.78			.95
SAMP SIZE	0	65	1	237	73	0	63	0	1	440
BOTH SEX	962	105,864	3,849	396,507	129,924	0	145,322	0	962	783,390
PERCENT	.12	13.51	.49	50.61	16.58		18.55		.12	100.00
AV LENGTH	382.00	511.29	405.00	574.65	518.69		585.86		516.00	557.74
STD ERROR		2.23	.66	.97	1.85		1.52			.72
SAMP SIZE	1	110	4	412	135	0	151	0	1	814

-Continued-

Table 22. Egegik River escapement of sockeye salmon sex, age, and length (mm) by period, 1982 (continued).

ALL PERIODS COMBINED										
	AGE GROUP									TOTAL
	32	42	43	52	53	62	63	73	74	
MALES	1,651	51,924	3,232	239,068	71,387	0	116,397	345	0	484,004
PERCENT	.16	5.02	.31	23.11	6.90		11.25	.03		46.78
AV LENGTH	389.51	523.03	407.80	590.97	532.99		598.82	631.00		575.14
STD ERROR	13.33	3.29	.50	1.18	2.14		1.44			.82
SAMP SIZE	3	70	4	380	96	0	180	1	0	734
FEMALES	689	76,341	2,685	288,399	94,724	345	86,479	0	962	550,624
PERCENT	.07	7.38	.26	27.87	9.16	.03	8.36		.09	53.22
AV LENGTH	370.00	506.35	402.27	565.75	509.74	610.00	571.63		516.00	547.70
STD ERROR	40.00	2.36	11.87	.88	2.07		1.77			.73
SAMP SIZE	2	105	6	412	144	1	138	0	1	809
BOTH SEX	2,340	128,265	5,917	527,467	166,111	345	202,876	345	962	1,034,628
PERCENT	.23	12.40	.57	50.98	16.06	.03	19.61	.03	.09	100.00
AV LENGTH	383.77	513.10	405.29	577.18	519.73	610.00	587.23	631.00	516.00	560.54
STD ERROR	17.89	1.93	7.12	.73	1.51		1.12			.55
SAMP SIZE	5	175	10	792	240	1	318	1	1	1,543

Table 23. Ugashik District commercial salmon catch by species and fishing effort by gear type, 1982.

Period	Hours	Drift	Set	Sockeye	Chinook	Chum	Pink	Coho	Total
June 7	120			95	1,440	2			1,537
14	15	13		64	293	3			360
15	24	19		171	777	4			952
16	24	16		160	706	7			873
17	24	13		570	568	28			1,166
18	24	8		597	481	32			1,110
19	9	13		1,672	279	93			2,044
21	15	17		1,676	562	92			2,330
22	24	18		1,884	462	107			2,453
23	24	12		4,511	169	257			4,937
24	24	5		3,521	59	196			3,776
25	12	20		15,053	224	842			16,119
27	10	4		2,612	25	57			2,694
28	24	30		31,518	75	2,174			33,767
29	24	35		30,650	180	2,018			32,848
30	18	45		29,320	75	2,174			31,569
July 2	18	14		11,208	30	610			11,848
3	24	34		51,566	65	447			52,078
4	20	55		97,666	57	1,035			98,758
6	14	46		82,568	26	478			83,072
7	24	60		131,580	63	4,971			136,614
8	24	61		127,099	22	3,676			130,797
9	24	59		100,231	57	2,592	2	1	102,883
10	24	88		97,338	74	3,186			100,598
11	24	132		107,682	95	4,906			112,683
12	24	119		42,717	52	3,404			46,173
13	24	87		34,703	64	1,854			36,621
14	24	91		38,614	64	3,030		3	41,711
15	24	83		27,429	51	3,148			30,628
16	24	38		13,070	21	1,688			14,779
17	24	47		13,630	17	1,718			15,365
18	24	23		6,956	9	942			7,907
19	24	16		3,773	10	653			4,436
20	24	39		6,936	10	1,804	2		8,752
21	24	18		2,462	7	801			3,270
22	24	9		1,568	1	1,039			2,608
23	24	3		592		191	1		784
24	9	5		1,168		777	142	14	2,101
25	15	1		782		51		5	838
27	24	1		901		77	1	17	996
28	24	2		1,304		82	2	21	1,409
29	24	1		415		31		10	456
30	24	2		1,185		92	7	28	1,312
31	9	3		445		50		6	501
Aug 2	120			8,355		1,042		578	9,975
9	120			1,003		730	8	3,845	5,586
16	120			172		13	5	15,016	16,206
23	120							18,826	18,826
30	120							7,457	7,457
Sept 6	120							3,976	3,976
Total				1,139,192	7,170	53,204	170	50,803	1,250,539
Percent				91.10	0.57	4.25	0.01	4.06	100.00

Table 24. Ugashik River catch and escapement of sockeye salmon by age group and sex, 1982.

	AGE GROUP									TOTAL
	32	41	42	43	52	53	62	63	73	
CATCH										
MALES										
NUMBER	0	4,747	37,973	0	393,970	75,946	4,747	109,173	0	626,556
PERCENT	.00	.42	3.33	.00	34.58	6.67	.42	9.58	.00	55.00
FEMALES										
NUMBER	0	0	52,213	0	355,997	52,213	0	52,213	0	512,636
PERCENT	.00	.00	4.58	.00	31.25	4.58	.00	4.58	.00	45.00
SEXES COMBINED										
NUMBER	0	4,747	90,186	0	749,967	128,159	4,747	161,386	0	1,139,192
PERCENT	.00	.42	7.92	.00	65.83	11.25	.42	14.17	.00	100.00
ESCAPEMENT										
MALES										
NUMBER	19,148	0	61,139	6,571	263,258	29,694	1,891	115,435	1,372	498,508
PERCENT	1.65	.00	5.28	.57	22.74	2.57	.16	9.97	.12	43.07
FEMALES										
NUMBER	0	0	68,562	0	417,430	69,508	473	103,045	0	659,018
PERCENT	.00	.00	5.92	.00	36.06	6.00	.04	8.90	.00	56.93
SEXES COMBINED										
NUMBER	19,148	0	129,701	6,571	680,688	99,202	2,364	218,480	1,372	1,157,526
PERCENT	1.65	.00	11.21	.57	58.81	8.57	.20	18.87	.12	100.00
CATCH AND ESCAPEMENT										
MALES										
NUMBER	19,148	4,747	99,112	6,571	657,228	105,640	6,638	224,608	1,372	1,125,064
PERCENT	.83	.21	4.32	.29	28.62	4.60	.29	9.78	.06	48.99
FEMALES										
NUMBER	0	0	120,775	0	773,427	121,721	473	155,258	0	1,171,654
PERCENT	.00	.00	5.26	.00	33.68	5.30	.02	6.76	.00	51.01
SEXES COMBINED										
NUMBER	19,148	4,747	219,887	6,571	1,430,655	227,361	7,111	379,866	1,372	2,296,718
PERCENT	.83	.21	9.57	.29	62.29	9.90	.31	16.54	.06	100.00

Table 25. Ugashik District commercial catch of sockeye salmon sex, age, length (mm), and weight (kg) by period, 1982.

ALL PERIODS COMBINED							
	AGE GROUP						TOTAL
	41	42	52	53	62	63	
MALES	4,747	37,973	393,970	75,946	4,747	109,173	626,556
PERCENT	.42	3.33	34.58	6.67	.42	9.58	55.00
AV LENGTH	541.00	517.37	594.76	547.94	608.00	601.65	585.29
STD ERROR		8.55	2.73	5.07		5.17	2.10
SAMP SIZE	1	8	83	16	1	23	132
AV WEIGHT		2.52	3.46	2.57		3.64	3.22
STD ERROR		.22	.11	.18		.29	.09
SAMP SIZE	0	2	19	3	0	4	28
FEMALES	0	52,213	355,997	52,213	0	52,213	512,636
PERCENT		4.58	31.25	4.58		4.58	45.00
AV LENGTH		520.18	575.00	541.82		572.45	565.78
STD ERROR		5.06	2.21	3.74		6.13	1.77
SAMP SIZE	0	11	75	11	0	11	108
AV WEIGHT			3.12	2.15		3.33	3.03
STD ERROR			.13			.13	.10
SAMP SIZE	0	0	14	1	0	3	18
BOTH SEX	4,747	90,186	749,967	128,159	4,747	161,386	1,139,192
PERCENT	.42	7.92	65.83	11.25	.42	14.17	100.00
AV LENGTH	541.00	519.00	585.38	545.45	608.00	592.20	576.51
STD ERROR		4.64	1.78	3.37		4.02	1.40
SAMP SIZE	1	19	158	27	1	34	240
AV WEIGHT		2.52	3.30	2.40		3.54	3.20
STD ERROR		.22	.09	.13		.18	.07
SAMP SIZE	0	2	33	4	0	7	46

Table 26. Ugashik River daily sockeye salmon escapement counts, 1982.

DATE	DAILY COUNT	ACCUMULATIVE COUNT	DAILY PERCENT OF TOTAL	ACCUMULATIVE PERCENT
JUNE 30	0	0	.00	.00
JULY 1	36	36	.00	.00
2	0	36	.00	.00
3	6	42	.00	.00
4	492	534	.04	.05
5	162	696	.01	.06
6	282	978	.02	.08
7	6,240	7,218	.54	.62
8	222	7,440	.02	.64
9	600	8,040	.05	.69
10	114	8,154	.01	.70
11	10,098	18,252	.87	1.58
12	83,364	101,616	7.20	8.78
13	362,574	464,190	31.32	40.10
14	193,482	657,672	16.72	56.82
15	222,864	880,536	19.25	76.07
16	111,204	991,740	9.61	85.68
17	47,286	1,039,026	4.09	89.76
18	68,688	1,107,714	5.93	95.70
19	12,966	1,120,680	1.12	96.82
20	12,444	1,133,124	1.08	97.89
21	5,454	1,138,578	.47	98.36
22	7,782	1,146,360	.67	99.04
23	3,090	1,149,450	.27	99.30
24	3,108	1,152,558	.27	99.57
25	3,330	1,155,888	.29	99.86
26	1,422	1,157,310	.12	99.98
27	216	1,157,526	.02	100.00

Table 27. Ugashik River escapement of sockeye salmon sex, age, and length (mm) by period, 1982.

	SAMPLE PERIOD 1 7/ 5- 7/15							TOTAL
	32	42	43	AGE GROUP			73	
				52	53	63		
MALES	6,858	37,032	1,372	209,846	16,459	94,637	1,372	367,576
PERCENT	.78	4.21	.16	23.83	1.87	10.75	.16	41.74
AV LENGTH	367.00	535.60	400.00	606.10	544.30	613.00	566.00	592.63
STD ERROR	7.42	3.52		1.41	5.48	2.36		1.11
SAMP SIZE	5	27	1	153	12	69	1	268
FEMALES	0	41,147	0	347,001	41,147	83,665	0	512,960
PERCENT		4.67		39.41	4.67	9.50		58.26
AV LENGTH		515.70		577.50	520.00	583.00		568.83
STD ERROR		4.00		1.10	4.89	1.95		.95
SAMP SIZE	0	30	0	253	30	61	0	374
BOTH SEX	6,858	78,179	1,372	556,847	57,606	178,302	1,372	880,536
PERCENT	.78	8.88	.16	63.24	6.54	20.25	.16	100.00
AV LENGTH	367.00	525.13	400.00	588.28	526.94	598.92	566.00	578.76
STD ERROR	7.42	2.69		.87	3.83	1.55		.72
SAMP SIZE	5	57	1	406	42	130	1	642

-Continued-

Table 27. Ugashik River escapement of sockeye salmon sex, age, and length (mm) by period, 1982 (continued).

	SAMPLE PERIOD 2 7/16- 7/25							TOTAL
	32	42	43	AGE GROUP			63	
				52	53	62		
MALES	12,290	24,107	5,199	53,412	13,235	1,891	20,798	130,932
PERCENT	4.44	8.70	1.88	19.28	4.78	.68	7.51	47.27
AV LENGTH	377.60	549.70	397.70	605.80	560.60	624.70	604.80	561.33
STD ERROR	3.18	5.64	4.31	1.66	8.56	12.85	3.68	1.67
SAMP SIZE	26	51	11	113	28	4	44	277
FEMALES	0	27,415	0	70,429	28,361	473	19,380	146,058
PERCENT		9.90		25.43	10.24	.17	7.00	52.73
AV LENGTH		519.40		574.70	524.00	513.00	575.00	554.32
STD ERROR		3.52		1.28	3.92		3.55	1.28
SAMP SIZE	0	58	0	149	60	1	41	309
BOTH SEX	12,290	51,522	5,199	123,841	41,596	2,364	40,178	276,990
PERCENT	4.44	18.60	1.88	44.71	15.02	.85	14.51	100.00
AV LENGTH	377.60	533.58	397.70	588.11	535.65	602.36	590.43	557.63
STD ERROR	3.18	3.24	4.31	1.02	3.82	12.85	2.56	1.04
SAMP SIZE	26	109	11	262	88	5	85	586

-Continued-

Table 27. Ugashik River escapement of sockeye salmon sex, age, and length (mm) by period, 1982 (continued).

ALL PERIODS COMBINED									
	AGE GROUP								TOTAL
	32	42	43	52	53	62	63	73	
MALES	19,148	61,139	6,571	263,258	29,694	1,891	115,435	1,372	498,508
PERCENT	1.65	5.28	.57	22.74	2.57	.16	9.97	.12	43.07
AV LENGTH	373.80	541.16	398.18	606.04	551.57	624.70	611.52	566.00	584.41
STD ERROR	2.92	3.89	3.95	1.07	6.21	12.85	2.03		1.01
SAMP SIZE	31	78	12	266	40	4	113	1	545
FEMALES	0	68,562	0	417,430	69,508	473	103,045	0	659,018
PERCENT		5.92		36.06	6.00	.04	8.90		56.93
AV LENGTH		517.18		577.03	521.63	513.00	581.50		565.61
STD ERROR		2.69		.84	3.08		1.84		.78
SAMP SIZE	0	88	0	402	90	1	102	0	683
BOTH SEX	19,148	129,701	6,571	680,688	99,202	2,364	218,480	1,372	1,157,526
PERCENT	1.65	11.21	.57	58.81	8.57	.20	18.87	.12	100.00
AV LENGTH	373.80	528.48	398.18	588.25	530.59	602.35	597.36	566.00	573.71
STD ERROR	2.92	2.32	3.95	.66	2.87	10.28	1.38		.62
SAMP SIZE	31	166	12	668	130	5	215	1	1,228

Table 28. Nushagak-Igushik District commercial salmon catch by species and fishing effort by gear type, 1982.

Period	Hours	Drift	Set	Sockeye	Chinook	Chum	Pink	Coho	Total
May 31	120			3	5,753	60			5,816
June 7	15	40		3	110	8			121
8	24	177		7	654	58			719
9	24	146		45	640	21			706
10	24	253		27	4,288	90			4,405
11	24	370		106	16,955	578			17,639
12	9	276		31	8,706	151			8,888
14	15	258		149	3,132	302			3,583
15	24	436		323	8,821	1,044			10,188
16	9	376		380	9,289	951			10,620
21 (1)	12	200		3,671	6,282	631			10,584
23	11	179		22,008	6,985	4,644			33,637
24 (2)	24	539		35,761	29,801	10,251			75,813
25 (3)	24	152		13,079	9,041	3,603			25,723
26	24	227		81,806	37,243	17,878			136,927
27	24	174		183,019	6,203	13,180			202,402
28	24	159		172,405	4,655	11,960			189,020
29	24	190		300,436	2,811	20,289			323,536
30	24	224		307,526	1,376	18,565			327,467
July 1	24	198		183,744	1,402	11,601	7		196,754
2	24	222		360,609	2,252	24,457	1		387,319
3	24	186		460,774	880	29,594			491,248
4	24	225		332,468	1,041	17,409	10		350,928
5	24	471		620,564	1,867	32,903	62	2	655,398
6	24	495		609,137	3,011	31,040	84	1	643,273
7	24	520		417,572	2,200	21,587	98		441,457
8	24	538		323,829	2,000	16,603	121		342,553
9	24	545		393,495	1,779	21,343	135		422,752
10	24	470		226,204	1,532	12,151	477	1	240,365
11	24	350		162,976	1,265	17,403	495	13	182,152
12	24	503		158,240	2,366	16,931	631	11	178,179
13	24	441		127,228	3,133	14,295	977	80	145,713
14	24	403		85,329	2,961	9,213	1,859	116	99,478
15	24	258		67,965	867	7,370	3,147	261	79,610
16	24	148		46,649	896	5,378	4,520	421	57,864
17	24	103		28,115	392	3,617	8,939	197	41,260
18	24	181		57,014	804	12,923	30,570	1,960	103,271
19	24	222		32,593	499	7,920	46,148	2,796	89,956
20	24	192		24,669	341	5,100	73,129	2,661	105,900
21	24	109		16,029	206	3,157	68,710	6,487	94,589
22	24	157		15,375	260	3,333	76,563	11,125	106,656
23	24	125		4,932	83	910	65,876	9,800	81,601
24	24	113		4,234	35	790	97,640	2,865	105,564
25	24	122		5,222	53	691	133,144	9,252	154,362
26	24	214		4,618	34	600	135,983	27,107	168,342
27	24	152		5,672	46	416	59,674	26,644	92,452
28	24	191		2,219	77	201	74,778	10,458	87,733
29	24	186		3,405	27	191	77,028	19,140	99,791
30	24	175		2,054	14	219	61,413	26,932	90,632
31	24	53		1,914	14	130	25,825	5,632	33,515
Aug 1	24	61		1,272	28	136	46,263	6,118	53,817
2	24	95		1,218	16	106	53,716	3,268	60,324
3	24	92		674	17	90	53,102	1,094	56,977
4	24	74		778	27	119	56,413	952	58,289
5	24	66		259	21	204	42,163	2,170	44,817
6	24	52		158	21	102	18,531	4,866	23,678
7	9	27		16	22	41	4,199	3,451	7,729
9	15	127		13	15	196	2,458	49,933	52,615
10	24	153		31	20	36	2,488	65,525	68,100
11	24	123		3	5	3	463	10,293	10,767
12	24	64		74	4	18	810	2,331	3,237
13	24	92		37	1	22	492	10,367	10,919
14	9	36		20			33	4,708	4,761
16	120			1	7	4	97	11,214	11,323
23	120				1			9,417	9,418
Total				5,916,187	195,287	434,817	1,339,272	349,669	8,235,232
Percent				71.84	2.37	5.28	16.26	4.25	100.00

Footnotes:

- (1) Igushik section.
- (2) Nushagak section 0001 - 1300 h, Igushik section 1300 - 2400 h.
- (3) Nushagak section 1800 - 2400 h, Igushik section 0001 - 1800 h.

Table 29. Nushagak-Igushik District inshore return of sockeye salmon by age group and sex, 1982.

	AGE GROUP									TOTAL
	32	42	43	51	52	53	62	63	73	
<b>MALES</b>										
CATCH	2,291	535,514	0	0	2,103,412	64,674	50,475	308,040	0	3,064,406
ESCAPEMENT	8,921	119,152	2,583	587	693,684	7,647	8,074	93,092	0	933,740
TOTAL	11,212	654,666	2,583	587	2,797,096	72,321	58,549	401,132	0	3,998,146
PERCENT	.28	16.37	.06	.01	69.96	1.81	1.46	10.03	.00	100.00
<b>FEMALES</b>										
CATCH	0	392,441	0	0	2,054,976	13,064	33,674	194,489	0	2,688,644
ESCAPEMENT	0	336,283	0	0	588,609	15,856	5,135	57,892	587	1,004,362
TOTAL	0	728,724	0	0	2,643,585	28,920	38,809	252,381	587	3,693,006
PERCENT	.00	19.73	.00	.00	71.58	.78	1.05	6.83	.02	100.00
<b>SEXES COMBINED</b>										
CATCH	2,291	927,955	0	0	4,158,388	77,738	84,149	502,529	0	5,753,050
ESCAPEMENT	8,921	455,435	2,583	587	1,282,293	23,503	13,209	150,984	587	1,938,102
TOTAL	11,212	1,383,390	2,583	587	5,440,681	101,241	97,358	653,513	587	7,691,152
PERCENT	.15	17.99	.03	.01	70.74	1.32	1.27	8.50	.01	100.00

Note: Does not include 11,600 spawners in Snake Lake.

the Igushik beach setnet catch, is presented in Table 30. Separate data for the Igushik beach setnet catch are presented in Table 31 and Appendix Table 16.

There are five river systems that drain into this district: Wood, Igushik, Nuyakuk, Snake, and Nushagak. To determine the total sockeye salmon run to each of the Wood, Igushik, and Nuyakuk Rivers, the catch in the Nushagak-Igushik District was apportioned to the three river systems according to the escapements of the different age class in each of the rivers. The Igushik beach setnet catches were allocated entirely to the Igushik River. There are few lake rearing areas on the Nushagak and Mulchatna Rivers and most sockeye salmon from those two rivers migrate to sea a year earlier than other Bristol Bay salmon. Catches were therefore not allocated to the Nushagak and Mulchatna Rivers because those early seaward migrating sockeye salmon, i.e., in the one-freshwater age class, are rarely caught in the Nushagak-Igushik District harvest. Catches were also not allocated to the Snake River because the Snake River escapement was less than 1% of the total Nushagak-Igushik District escapement.

The total run to the Wood River was estimated to be 3.7 million (Table 32). The Wood River daily escapement counts and the age, sex, and length statistics are presented in Table 33 and 34, respectively. The total run to the Igushik River was estimated to be 1.8 million (Table 35). The Igushik River daily escapement counts and the age, sex, and length statistics are presented in Table 36 and 37, respectively. The total run to the Nuyakuk River was estimated to be 2.3 million (Table 38). The Nuyakuk River daily escapement counts and the age, sex, and length statistics are presented in Table 39 and 40, respectively.

The headwaters of the Nushagak River system includes the Nuyakuk River (Tikchik Lake system), the Mulchatna River as well as the Nushagak River. Only the Nuyakuk River had daily escapement counts. An escapement of 63 thousand in the Nushagak and Mulchatna Rivers were estimated through aerial surveys. The number of spawners in both the Nushagak and the Mulchatna Rivers were less than 12% of that counted in the Nuyakuk River and appear as a footnote to the daily Nuyakuk escapement counts in Table 39.

Sex, age, weight, and length data on the catch and escapement of chinook, chum, and pink salmon are presented in Tables 41 to 47.

#### Togiak District

The Togiak District had a harvest of nearly 596 thousand fish with sockeye, chum, and coho catches being 63, 16, and 14% of the total harvest (Table 48). Chinook and pink catches were another 4 and 3% of the total harvest, respectively. Total return of catch plus escapement in this district was over 885 thousand (Table 49). Sex, age, weight, and length data on the sockeye catch are presented in Table 50. Daily Togiak Lake escapement counts are presented in Table 51. Togiak District escapement counts, including spawners seen down river of the counting tower, spawners counted in other tributaries within the Togiak District, but not including spawners from the Kulukak system, added up to 889 thousand spawners (Table 51). Sex, age, weight, and length data on the sockeye salmon catch are presented in Table 52.

Table 30. Nushagak-Igushik District commercial catch of sockeye salmon sex, age, length (mm), and weight (kg), by period, 1982.

	SAMPLE PERIOD 1		AGE GROUP				TOTAL
	5/31-	7/ 1	32	42	52	53	
MALE	0	71,241	546,177	7,916	11,873	69,262	706,469
PERCENT	.00	5.51	42.27	.61	.92	5.36	54.67
AV LENGTH	.00	514.06	584.10	549.00	599.50	584.91	576.98
STD ERROR	.00	3.59	1.58	6.97	12.53	4.17	1.36
SAMP SIZE	0	36	276	4	6	35	357
AV WEIGHT	.00	2.26	3.58	.00	.00	3.22	3.52
STD ERROR	.00	.00	.08	.00	.00	.41	.08
SAMP SIZE	0	1	40	0	0	4	45
FEMALE	0	27,705	468,999	3,958	17,810	67,283	585,755
PERCENT	.00	2.14	36.29	.31	1.38	5.21	45.33
AV LENGTH	.00	511.14	557.22	535.50	564.22	568.76	556.43
STD ERROR	.00	5.31	1.29	8.50	6.00	4.37	1.19
SAMP SIZE	0	14	237	2	9	34	296
AV WEIGHT	.00	2.04	2.94	.00	.00	3.23	2.94
STD ERROR	.00	.00	.10	.00	.00	.13	.09
SAMP SIZE	0	1	17	0	0	3	21
BOTH SEX	0	98,946	1,015,176	11,874	29,683	136,545	1,292,224
PERCENT	.00	7.66	78.56	.92	2.30	10.57	100.00
AV LENGTH	.00	513.24	571.68	544.50	578.33	576.95	567.67
STD ERROR	.00	2.98	1.04	5.44	6.17	3.02	.92
SAMP SIZE	0	50	513	6	15	69	653
AV WEIGHT	.00	2.15	3.39	.00	.00	3.22	3.33
STD ERROR	.00	.00	.07	.00	.00	.24	.06
SAMP SIZE	0	2	57	0	0	7	66

Note: Does not include 163,137 Igushik beach senet commercial catch.

-Continued-

Table 30. Nushagak-Igushik District commercial catch of sockeye salmon sex, age, length (mm), and weight (kg), by period, 1982 (continued).

	SAMPLE PERIOD 2 7/ 2- 7/ 7		AGE GROUP				TOTAL
	32	42	52	53	62	63	
MALE	0 244,318	954,650	40,720	27,146	140,257	1,407,091	
PERCENT	.00	9.08	35.46	1.51	1.01	5.21	52.27
AV LENGTH	.00	517.59	582.04	530.00	610.83	587.48	570.44
STD ERROR	.00	3.14	1.67	7.14	9.19	4.75	1.37
SAMP SIZE	0	54	211	9	6	31	311
AV WEIGHT	.00	2.40	3.62	2.85	.00	3.51	3.37
STD ERROR	.00	.11	.13	.00	.00	.20	.09
SAMP SIZE	0	5	18	1	0	6	30
FEMALE	0 144,781	1,036,090	4,524	13,573	85,964	1,284,932	
PERCENT	.00	5.38	38.49	.17	.50	3.19	47.73
AV LENGTH	.00	499.44	556.80	542.00	568.33	562.79	550.81
STD ERROR	.00	3.72	1.29	.00	5.61	4.25	1.16
SAMP SIZE	0	32	229	1	3	19	284
AV WEIGHT	.00	1.95	2.90	.00	2.85	3.20	2.85
STD ERROR	.00	.09	.07	.00	.00	.03	.06
SAMP SIZE	0	2	24	0	1	2	29
BOTH SEX	0 389,099	1,990,740	45,244	40,719	226,221	2,692,023	
PERCENT	.00	14.45	73.95	1.68	1.51	8.40	100.00
AV LENGTH	.00	510.84	568.90	531.20	596.66	578.10	561.07
STD ERROR	.00	2.41	1.04	7.14	6.40	3.36	.91
SAMP SIZE	0	86	440	10	9	50	595
AV WEIGHT	.00	2.27	3.21	2.85	2.85	3.43	3.12
STD ERROR	.00	.08	.07	.00	.00	.15	.05
SAMP SIZE	0	7	42	1	1	8	59

Note: Does not include 163,137 Igushik beach setnet commercial catch.

-Continued-

Table 30. Nushagak-Igushik District commercial catch of sockeye salmon sex, age, length (mm), and weight (kg), by period, 1982 (continued).

	SAMPLE PERIOD 3 7/ 8- 8/13						
	AGE GROUP						TOTAL
	32	42	52	53	62	63	
MALE	2,291	219,955	602,585	16,038	11,456	98,521	950,846
PERCENT	.13	12.44	34.07	.91	.65	5.57	53.76
AV LENGTH	346.00	513.01	576.05	518.71	604.80	580.09	560.71
STD ERROR	.00	2.68	1.54	14.70	14.48	4.01	1.27
SAMP SIZE	1	96	263	7	5	43	415
AV WEIGHT	.00	2.31	3.41	.00	.00	4.33	3.19
STD ERROR	.00	.15	.10	.00	.00	.25	.08
SAMP SIZE	0	9	26	0	0	2	37
FEMALE	0	219,955	549,887	4,582	2,291	41,242	817,957
PERCENT	.00	12.44	31.09	.26	.13	2.33	46.24
AV LENGTH	.00	493.79	552.72	505.50	594.00	558.89	538.65
STD ERROR	.00	2.09	1.28	3.50	.00	4.59	1.06
SAMP SIZE	0	96	240	2	1	18	357
AV WEIGHT	.00	2.09	2.90	.00	.00	3.00	2.70
STD ERROR	.00	.09	.07	.00	.00	.21	.06
SAMP SIZE	0	9	22	0	0	4	35
BOTH SEX	2,291	439,910	1,152,472	20,620	13,747	139,763	1,768,803
PERCENT	.13	24.87	65.16	1.17	.78	7.90	100.00
AV LENGTH	346.00	506.40	564.92	515.77	603.00	573.83	550.51
STD ERROR	.00	1.70	1.01	11.46	14.48	3.14	.84
SAMP SIZE	1	192	503	9	6	61	772
AV WEIGHT	.00	2.20	3.18	.00	.00	3.44	2.95
STD ERROR	.00	.09	.06	.00	.00	.16	.05
SAMP SIZE	0	18	48	0	0	6	72

Note: Does not include 163,137 Igushik beach setnet commercial catch.

-Continued-

Table 30. Nushagak-Igushik District commercial catch of sockeye salmon sex, age, length (mm), and weight (kg), by period, 1982 (continued).

ALL PERIODS COMBINED							
	AGE GROUP						
	32	42	52	53	62	63	TOTAL
MALE	2,291	535,514	2,103,412	64,674	50,475	308,040	3,064,406
PERCENT	.04	9.31	36.56	1.12	.88	5.35	53.27
AV LENGTH	346.00	515.24	580.86	529.53	606.80	584.54	568.93
STD ERROR	.00	1.79	.92	6.22	6.94	2.47	.77
SAMP SIZE	1	186	750	20	17	109	1,083
AV WEIGHT	.00	2.34	3.55	2.85	.00	3.71	3.34
STD ERROR	.00	.10	.06	.00	.00	.17	.05
SAMP SIZE	0	15	84	1	0	12	112
FEMALE	0	392,441	2,054,976	13,064	33,674	194,489	2,688,644
PERCENT	.00	6.82	35.72	.23	.59	3.38	46.73
AV LENGTH	.00	500.46	555.80	527.23	567.90	564.03	548.33
STD ERROR	.00	1.73	.74	3.68	4.35	2.65	.65
SAMP SIZE	0	142	706	5	13	71	937
AV WEIGHT	.00	2.03	2.91	.00	2.85	3.17	2.80
STD ERROR	.00	.07	.04	.00	.00	.10	.04
SAMP SIZE	0	12	63	0	1	9	85
BOTH SEX	2,291	927,955	4,158,388	77,738	84,149	502,529	5,753,050
PERCENT	.04	16.13	72.28	1.35	1.46	8.74	100.00
AV LENGTH	346.00	508.99	568.48	529.14	591.23	576.60	559.30
STD ERROR	.00	1.26	.60	5.03	4.36	1.83	.51
SAMP SIZE	1	328	1,456	25	30	180	2,020
AV WEIGHT	.00	2.21	3.23	2.85	2.85	3.50	3.09
STD ERROR	.00	.06	.04	.00	.00	.11	.03
SAMP SIZE	0	27	147	1	1	21	197

Note: Does not include 163,137 Igushik beach setnet commercial catch.

Table 31. Igushik beach setnet commercial catch of sockeye salmon sex, age, length (mm), and weight (kg) by period, 1982.

ALL PERIODS COMBINED						
	AGE GROUP					
	42	52	53	62	63	TOTAL
MALE	6,171	67,348	1,073	2,147	14,757	91,496
PERCENT	3.78	41.28	.66	1.32	9.05	56.09
AV LENGTH	515.52	586.18	598.50	595.75	588.64	582.18
STD ERROR	6.59	1.60	17.52	6.14	2.85	1.36
SAMP SIZE	23	251	4	8	55	341
AV WEIGHT	2.51	3.62	.00	4.01	3.80	3.58
STD ERROR	.14	.10	.00	.38	.19	.08
SAMP SIZE	4	24	0	2	5	35
FEMALE	5,903	52,591	805	268	12,074	71,641
PERCENT	3.62	32.24	.49	.16	7.40	43.91
AV LENGTH	502.91	560.64	524.67	581.00	561.33	555.67
STD ERROR	4.11	1.54	26.21	.00	3.01	1.32
SAMP SIZE	22	196	3	1	45	267
AV WEIGHT	2.00	3.07	.00	.00	2.60	2.90
STD ERROR	.14	.08	.00	.00	.10	.06
SAMP SIZE	5	19	0	0	3	27
BOTH SEX	12,074	119,939	1,878	2,415	26,831	163,137
PERCENT	7.40	73.52	1.15	1.48	16.45	100.00
AV LENGTH	509.35	574.98	566.85	594.11	576.35	570.54
STD ERROR	3.92	1.12	15.04	5.46	2.07	.96
SAMP SIZE	45	447	7	9	100	608
AV WEIGHT	2.26	3.38	.00	4.01	3.26	3.28
STD ERROR	.10	.07	.00	.38	.13	.05
SAMP SIZE	9	43	0	2	8	62

Table 32. Wood River apportioned catch and escapement of sockeye salmon by age group and sex, 1982.

	AGE GROUP							TOTAL
	32	42	43	52	53	62	63	
CATCH								
MALES								
NUMBER	1,990	425,959	0	728,712	38,989	14,991	107,985	1,318,626
PERCENT	.08	16.16	.00	27.65	1.48	.57	4.10	50.03
FEMALES								
NUMBER	0	357,074	0	862,152	10,891	4,433	82,580	1,317,130
PERCENT	.00	13.55	.00	32.71	.41	.17	3.13	49.97
SEXES COMBINED								
NUMBER	1,990	783,033	0	1,590,864	49,880	19,424	190,565	2,635,756
PERCENT	.08	29.71	.00	60.36	1.89	.74	7.23	100.00
ESCAPEMENT								
MALES								
NUMBER	7,748	94,776	2,583	240,322	4,610	2,398	32,634	385,071
PERCENT	.79	9.71	.26	24.61	.47	.25	3.34	39.44
FEMALES								
NUMBER	0	305,977	0	246,947	13,218	676	24,581	591,399
PERCENT	.00	31.34	.00	25.29	1.35	.07	2.52	60.56
SEXES COMBINED								
NUMBER	7,748	400,753	2,583	487,269	17,828	3,074	57,215	976,470
PERCENT	.79	41.04	.26	49.90	1.83	.31	5.86	100.00
CATCH AND ESCAPEMENT								
MALES								
NUMBER	9,738	520,735	2,583	969,034	43,599	17,389	140,619	1,703,697
PERCENT	.27	14.42	.07	26.83	1.21	.48	3.89	47.16
FEMALES								
NUMBER	0	663,051	0	1,109,099	24,109	5,109	107,161	1,908,529
PERCENT	.00	18.36	.00	30.70	.67	.14	2.97	52.84
SEXES COMBINED								
NUMBER	9,738	183,786	2,583	2,078,133	67,708	22,498	247,780	3,612,226
PERCENT	.27	32.77	.07	57.53	1.87	.62	6.86	100.00

Table 33. Wood River daily sockeye salmon escapement counts, 1982.

DATE	DAILY COUNT	ACCUMULATIVE COUNT	DAILY PERCENT OF TOTAL	ACCUMULATIVE PERCENT
JUNE 17	0	0	.00	.00
18	0	0	.00	.00
19	0	0	.00	.00
20	0	0	.00	.00
21	750	750	.08	.08
22	2,718	3,468	.28	.36
23	2,304	5,772	.24	.59
24	696	6,468	.07	.66
25	864	7,332	.09	.75
26	1,968	9,300	.20	.95
27	16,062	25,362	1.64	2.60
28	33,492	58,854	3.43	6.03
29	43,494	102,348	4.45	10.48
30	94,734	197,082	9.70	20.18
JULY 1	100,752	297,834	10.32	30.50
2	68,298	366,132	6.99	37.50
3	65,544	431,676	6.71	44.21
4	126,222	557,898	12.93	57.13
5	129,912	687,810	13.30	70.44
6	44,322	732,132	4.54	74.98
7	41,154	773,286	4.21	79.19
8	33,882	807,168	3.47	82.66
9	16,470	823,638	1.69	84.35
10	12,306	835,944	1.26	85.61
11	18,948	854,892	1.94	87.55
12	17,034	871,926	1.74	89.29
13	15,288	887,214	1.57	90.86
14	22,200	909,414	2.27	93.13
15	14,352	923,766	1.47	94.60
16	10,536	934,302	1.08	95.68
17	13,206	947,508	1.35	97.03
18	12,600	960,108	1.29	98.32
19	7,782	967,890	.80	99.12
20	5,064	972,954	.52	99.64
21	3,420	976,374	.35	99.99
22	96	976,470	.01	100.00

Table 34. Wood River escapement of sockeye salmon sex, age, and length (mm) by period, 1982.

SAMPLE PERIOD	1 6/27- 7/ 2							TOTAL
	32	42	43	AGE GROUP			63	
				52	53	62	63	
MALES	0	31,074	0	124,970	2,027	676	12,835	171,582
PERCENT		8.49		34.13	.55	.18	3.51	46.86
AV LENGTH		501.00		582.70	524.00	602.00	589.70	567.81
STD ERROR		4.36		1.76	3.81		4.75	1.55
SAMP SIZE	0	46	0	185	3	1	19	254
FEMALES	0	42,558	0	138,481	2,027	676	10,808	194,550
PERCENT		11.62		37.82	.55	.18	2.95	53.14
AV LENGTH		485.20		552.20	503.30	542.00	554.40	537.12
STD ERROR		2.82		1.42	5.83		4.72	1.22
SAMP SIZE	0	63	0	205	3	1	16	288
BOTH SEX	0	73,632	0	263,451	4,054	1,352	23,643	366,132
PERCENT		20.11		71.96	1.11	.37	6.46	100.00
AV LENGTH		491.87		566.67	513.65	572.00	573.56	551.50
STD ERROR		2.46		1.12	3.48		3.36	.97
SAMP SIZE	0	109	0	390	6	2	35	542

-Continued-

Table 34. Wood River escapement of sockeye salmon sex, age, and length (mm) by period, 1982 (continued).

	SAMPLE PERIOD 2 7/ 3- 7/19							TOTAL
	32	42	43	AGE GROUP			63	
				52	53	62		
MALES	7,748	63,702	2,583	115,352	2,583	1,722	19,799	213,489
PERCENT	1.27	10.44	.42	18.90	.42	.28	3.24	34.98
AV LENGTH	387.60	488.40	397.30	576.60	507.00	585.50	583.50	541.12
STD ERROR	14.30	3.63	10.45	2.07	13.05	16.48	4.00	1.70
SAMP SIZE	9	74	3	134	3	2	23	248
FEMALES	0	263,419	0	108,466	11,191	0	13,773	396,849
PERCENT		43.16		17.77	1.83		2.26	65.02
AV LENGTH		469.80		545.10	475.20		557.70	493.58
STD ERROR		1.29		1.67	6.18		5.97	1.01
SAMP SIZE	0	306	0	126	13	0	16	461
BOTH SEX	7,748	327,121	2,583	223,818	13,774	1,722	33,572	610,338
PERCENT	1.27	53.60	.42	36.67	2.26	.28	5.50	100.00
AV LENGTH	387.60	473.42	397.30	561.33	481.16	585.50	572.92	510.21
STD ERROR	14.30	1.26	10.45	1.34	5.59	16.48	3.40	.89
SAMP SIZE	9	380	3	260	16	2	39	709

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Table 34. Wood River escapement of sockeye salmon sex, age, and length (mm) by period, 1982 (continued).

ALL PERIODS COMBINED								
	AGE GROUP							
	32	42	43	52	53	62	63	TOTAL
MALES	7,748	94,776	2,583	240,322	4,610	2,398	32,634	385,071
PERCENT	.79	9.71	.26	24.61	.47	.25	3.34	39.44
AV LENGTH	387.60	492.53	397.30	579.77	514.47	590.15	585.94	553.01
STD ERROR	14.30	2.79	10.45	1.34	6.80	10.98	3.07	1.15
SAMP SIZE	9	120	3	319	6	3	42	502
FEMALES	0	305,977	0	246,947	13,218	676	24,581	591,399
PERCENT		31.34		25.29	1.35	.07	2.52	60.56
AV LENGTH		471.94		549.08	479.51	542.00	556.25	507.91
STD ERROR		1.17		1.09	5.14		3.81	.78
SAMP SIZE	0	369	0	331	16	1	32	749
BOTH SEX	7,748	400,753	2,583	487,269	17,828	3,074	57,215	976,470
PERCENT	.79	41.04	.26	49.90	1.83	.31	5.86	100.00
AV LENGTH	387.60	476.81	397.30	564.22	488.55	579.56	573.18	525.69
STD ERROR	14.30	1.12	10.45	.86	4.17	8.24	2.40	.65
SAMP SIZE	9	489	3	650	22	4	74	1,251

Table 35. Igushik River apportioned catch and escapement of sockeye salmon by age group and sex, 1982.

	AGE GROUP					TOTAL
	42	52	53	62	63	
CATCH						
MALES						
NUMBER	49,820	680,833	11,873	19,295	94,477	856,298
PERCENT	3.22	43.94	.77	1.25	6.10	55.27
FEMALES						
NUMBER	15,944	592,173	2,012	14,125	68,809	693,063
PERCENT	1.03	38.22	.13	.91	4.44	44.73
SEXES COMBINED						
NUMBER	65,764	273,006	13,885	33,420	163,286	1,549,361
PERCENT	4.24	82.16	.90	2.16	10.54	100.00
ESCAPEMENT						
MALES						
NUMBER	9,712	202,321	1,277	2,743	24,092	240,145
PERCENT	2.29	47.74	.30	.65	5.69	56.67
FEMALES						
NUMBER	8,604	154,553	1,465	2,113	16,888	183,623
PERCENT	2.03	36.47	.35	.50	3.93	43.33
SEXES COMBINED						
NUMBER	18,316	356,874	2,742	4,856	40,980	423,768
PERCENT	4.32	84.21	.65	1.15	9.67	100.00
CATCH AND ESCAPEMENT						
MALES						
NUMBER	59,532	883,154	13,150	22,038	118,569	1,096,443
PERCENT	3.02	44.76	.67	1.12	6.01	55.57
FEMALES						
NUMBER	24,548	746,726	3,477	16,238	85,697	876,686
PERCENT	1.24	37.84	.18	.82	4.34	44.43
SEXES COMBINED						
NUMBER	84,080	629,880	16,627	38,276	204,266	1,973,129
PERCENT	4.26	82.60	.84	1.94	10.35	100.00

Note: Includes Igushik beach setnet catches (from Table 31).

Table 36. Igushik River daily sockeye salmon escapement counts, 1982.

DATE	DAILY COUNT	ACCUMULATIVE COUNT	DAILY PERCENT OF TOTAL	ACCUMULATIVE PERCENT
JUNE 23	0	0	.00	.00
24	0	0	.00	.00
25	0	0	.00	.00
26	0	0	.00	.00
27	0	0	.00	.00
28	12,858	12,858	3.03	3.03
29	0	12,858	.00	3.03
30	2,718	15,576	.64	3.68
JULY 1	34,626	50,202	8.17	11.85
2	5,448	55,650	1.29	13.13
3	34,518	90,168	8.15	21.28
4	40,380	130,548	9.53	30.81
5	56,370	186,918	13.30	44.11
6	63,426	250,344	14.97	59.08
7	37,752	288,096	8.91	67.98
8	27,960	316,056	6.60	74.58
9	16,014	332,070	3.78	78.36
10	32,310	364,380	7.62	85.99
11	13,386	377,766	3.16	89.14
12	9,420	387,186	2.22	91.37
13	5,514	392,700	1.30	92.67
14	4,098	396,798	.97	93.64
15	5,520	402,318	1.30	94.94
16	5,232	407,550	1.23	96.17
17	3,870	411,420	.91	97.09
18	4,830	416,250	1.14	98.23
19	3,390	419,640	.80	99.03
20	2,418	422,058	.57	99.60
21	1,386	423,444	.33	99.92
22	324	423,768	.08	100.00

Table 37. Igushik River escapement of sockeye salmon sex, age, and length (mm), by period, 1982.

SAMPLE PERIOD	1 7/ 1- 7/ 7		AGE GROUP			TOTAL
	42	52	53	62	63	
MALES	6,443	148,650	460	1,381	15,647	172,581
PERCENT	2.24	51.60	.16	.48	5.43	59.90
AV LENGTH	525.00	592.10	617.00	586.30	598.30	590.18
STD ERROR	5.85	1.30		6.47	3.40	1.18
SAMP SIZE	14	323	1	3	34	375
FEMALES	5,062	94,346	920	1,841	13,346	115,515
PERCENT	1.76	32.75	.32	.64	4.63	40.10
AV LENGTH	510.90	561.10	520.50	562.50	567.20	559.30
STD ERROR	7.96	1.25	10.47	3.30	3.14	1.14
SAMP SIZE	11	205	2	4	29	251
BOTH SEX	11,505	242,996	1,380	3,222	28,993	288,096
PERCENT	3.99	84.35	.48	1.12	10.06	100.00
AV LENGTH	518.80	580.06	552.67	572.70	583.98	577.80
STD ERROR	4.80	.93	10.47	3.35	2.33	.84
SAMP SIZE	25	528	3	7	63	626

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Table 37. Igushik River escapement of sockeye salmon sex, age, and length (mm), by period, 1982 (continued).

	SAMPLE PERIOD 2 7/ 8- 7/18		AGE GROUP			TOTAL
	42	52	53	62	63	
MALES	3,269	53,671	817	1,362	8,445	67,564
PERCENT	2.41	39.56	.60	1.00	6.22	49.80
AV LENGTH	517.70	593.10	577.00	602.20	602.60	590.63
STD ERROR	8.80	1.64	6.81	11.05	3.74	1.47
SAMP SIZE	12	197	3	5	31	248
FEMALES	3,542	60,207	545	272	3,542	68,108
PERCENT	2.61	44.38	.40	.20	2.61	50.20
AV LENGTH	502.60	563.10	541.00	542.00	570.80	560.09
STD ERROR	8.38	1.28	36.98		7.29	1.31
SAMP SIZE	13	221	2	1	13	250
BOTH SEX	6,811	113,878	1,362	1,634	11,987	135,672
PERCENT	5.02	83.94	1.00	1.20	8.84	100.00
AV LENGTH	509.85	577.24	562.60	592.17	593.20	575.30
STD ERROR	6.07	1.03	15.35	11.05	3.40	.98
SAMP SIZE	25	418	5	6	44	498

-Continued-

Table 37. Igushik River escapement of sockeye salmon sex, age, and length (mm), by period, 1982 (continued).

ALL PERIODS COMBINED						
	AGE GROUP					
	42	52	53	62	63	TOTAL
MALES	9,712	202,321	1,277	2,743	24,092	240,145
PERCENT	2.29	47.74	.30	.65	5.69	56.67
AV LENGTH	522.54	592.37	591.41	594.19	599.81	590.30
STD ERROR	5.14	1.02	5.11	7.32	2.52	.92
SAMP SIZE	26	520	4	8	65	623
FEMALES	8,604	154,553	1,465	2,113	16,888	183,623
PERCENT	2.03	36.47	.35	.50	3.99	43.33
AV LENGTH	507.48	561.88	528.13	559.86	567.96	559.60
STD ERROR	5.82	.90	19.22	2.64	3.13	.87
SAMP SIZE	24	426	4	5	42	501
BOTH SEX	18,316	356,874	2,742	4,856	40,980	423,768
PERCENT	4.32	84.21	.65	1.15	9.67	100.00
AV LENGTH	515.47	579.16	557.60	579.26	586.68	577.00
STD ERROR	3.87	.69	9.94	4.62	1.96	.64
SAMP SIZE	50	946	8	13	107	1,124

Table 38. Nuyakuk River apportioned catch and escapement of sockeye salmon by age group and sex, 1982.

	AGE GROUP								
	32	42	51	52	53	62	63	73	TOTAL
CATCH									
MALES									
NUMBER	301	65,906	0	761,215	14,885	18,336	120,335	0	980,978
PERCENT	.02	3.81	.00	43.97	.86	1.06	6.95	.00	56.67
FEMALES									
NUMBER	0	25,326	0	653,243	966	15,384	55,173	0	750,092
PERCENT	.00	1.46	.00	37.74	.06	.89	3.19	.00	43.33
SEXES COMBINED									
NUMBER	301	91,232	0	1,414,458	15,851	33,720	175,508	0	1,731,070
PERCENT	.02	5.27	.00	81.71	.92	1.95	10.14	.00	100.00
ESCAPEMENT									
MALES									
NUMBER	1,173	14,664	587	251,041	1,760	2,933	36,366	0	308,524
PERCENT	.22	2.73	.11	46.67	.33	.55	6.76	.00	57.36
FEMALES									
NUMBER	0	21,702	0	187,109	1,173	2,346	16,423	587	229,340
PERCENT	.00	4.03	.00	34.79	.22	.44	3.05	.11	42.64
SEXES COMBINED									
NUMBER	1,173	36,366	587	438,150	2,933	5,279	52,789	587	537,864
PERCENT	.22	6.76	.11	81.46	.55	.98	9.81	.11	100.00
CATCH AND ESCAPEMENT									
MALES									
NUMBER	1,474	80,570	587	1,012,256	16,645	21,269	156,701	0	1,289,502
PERCENT	.06	3.55	.03	44.61	.73	.94	6.91	.00	56.83
FEMALES									
NUMBER	0	47,028	0	840,352	2,139	17,730	71,596	587	979,432
PERCENT	.00	2.07	.00	37.04	.09	.78	3.16	.03	43.17
SEXES COMBINED									
NUMBER	1,474	127,598	587	1,852,608	18,784	38,999	228,297	587	2,268,934
PERCENT	.06	5.62	.03	81.65	.83	1.72	10.06	.03	100.00

Table 39. Nuyakuk River daily sockeye salmon escapement counts, 1982.

DATE	DAILY COUNT	ACCUMULATIVE COUNT	DAILY PERCENT OF TOTAL	ACCUMULATIVE PERCENT
JULY 5	1,812	1,812	.34	.34
6	44,958	46,770	8.36	8.70
7	66,798	113,568	12.42	21.11
8	62,280	175,848	11.58	32.69
9	73,410	249,258	13.65	46.34
10	71,610	320,868	13.31	59.66
11	76,056	396,924	14.14	73.80
12	47,190	444,114	8.77	82.57
13	31,830	475,944	5.92	88.49
14	18,234	494,178	3.39	91.88
15	11,568	505,746	2.15	94.03
16	9,564	515,310	1.78	95.81
17	6,648	521,958	1.24	97.04
18	4,476	526,434	.83	97.87
19	2,706	529,140	.50	98.38
20	2,154	531,294	.40	98.78
21	1,008	532,302	.19	98.97
22	852	533,154	.16	99.12
23	1,464	534,618	.27	99.40
24	1,182	535,800	.22	99.62
25	522	536,322	.10	99.71
26	468	536,790	.09	99.80
27	366	537,156	.07	99.87
28	336	537,492	.06	99.93
29	288	537,780	.05	99.98
30	84	537,864	.02	100.00

Note: Does not include 63,000 spawners in the Nushagak and Mulchatna Rivers.

Table 40. Nuyakuk River escapement of sockeye salmon sex, age, and length (mm), 1982.

	SAMPLE PERIOD 7/ 4- 7/30								TOTAL
	AGE GROUP								
	32	42	51	52	53	62	63	73	
MALES	1,173	14,664	587	251,041	1,760	2,933	36,366	0	308,524
PERCENT	.22	2.73	.11	46.67	.33	.55	6.76		57.36
AV LENGTH	345.00	483.50	470.00	599.30	588.70	587.80	603.90		592.96
STD ERROR	29.98	11.24		1.14	3.70	24.87	2.59		1.14
SAMP SIZE	2	25	1	428	3	5	62	0	526
FEMALES	0	21,702	0	187,109	1,173	2,346	16,423	587	229,340
PERCENT		4.03		34.79	.22	.44	3.05	.11	42.64
AV LENGTH		496.70		559.40	516.50	574.20	566.30	567.00	553.91
STD ERROR		7.46		1.09	48.51	18.60	4.33		1.22
SAMP SIZE	0	37	0	319	2	4	28	1	391
BOTH SEX	1,173	36,366	587	438,150	2,933	5,279	52,789	587	537,864
PERCENT	.22	6.76	.11	81.46	.55	.98	9.81	.11	100.00
AV LENGTH	345.00	491.38	470.00	582.26	559.82	581.76	592.20	567.00	576.31
STD ERROR	29.98	6.35		.80	19.53	16.10	2.24		.84
SAMP SIZE	2	62	1	747	5	9	90	1	917

Table 41. Nushagak-Igushik District commercial chinook salmon sex, age, length (mm), and weight (kg), 1982.

SAMPLE PERIOD 6/ 9 - 7/14									
	AGE GROUP								TOTAL
	32	42	52	53	62	63	72	73	
MALES	951	12,550	53,053	1,711	29,474	5,134	2,662	1,711	107,246
PERCENT	.49	6.43	27.17	.88	15.09	2.63	1.36	.88	54.92
AV LENGTH	417.60	640.33	751.25	699.78	857.58	799.11	908.21	905.11	772.35
STD ERROR	22.87	11.92	3.34	35.67	5.26	14.14	22.31	17.81	2.83
SAMP SIZE	5	66	279	9	155	27	14	9	564
AV WEIGHT		5.59	7.72	2.90	11.22	10.99	13.38	14.68	8.77
STD ERROR		.64	.18		.47	2.19		.69	.19
SAMP SIZE	0	14	60	1	33	3	1	4	116
FEMALES	190	4,754	29,284	570	44,115	2,662	4,564	1,902	88,041
PERCENT	.10	2.43	15.00	.29	22.59	1.36	2.34	.97	45.08
AV LENGTH	575.00	696.88	774.23	729.67	858.13	819.50	895.00	872.80	821.13
STD ERROR		16.39	5.08	19.46	3.36	15.46	16.27	18.33	2.75
SAMP SIZE	1	25	154	3	232	14	24	10	463
AV WEIGHT		6.01	8.01	7.43	10.97	9.23	13.04	10.88	9.74
STD ERROR		.87	.33		.42	.47	.57		.23
SAMP SIZE	0	8	39	1	39	3	4	1	95
BOTH SEX	1,141	17,304	82,337	2,281	73,589	7,796	7,226	3,613	195,287
PERCENT	.58	8.86	42.16	1.17	37.68	3.99	3.70	1.85	100.00
AV LENGTH	443.81	655.87	759.42	707.25	857.91	806.07	899.87	888.10	794.35
STD ERROR	19.06	9.75	2.81	27.19	2.91	10.71	13.16	12.82	1.99
SAMP SIZE	6	91	433	12	387	41	38	19	1,027
AV WEIGHT		5.71	7.82	4.03	11.07	10.39	13.17	12.68	9.21
STD ERROR		.52	.17		.31	1.12	.46	.56	.15
SAMP SIZE	0	22	99	2	72	6	5	5	211

Table 42. Nushagak-Mulchatna River escapement of chinook salmon sex, age, and length (mm), 1982.

SAMPLE PERIOD 8/ 5 - 8/17									
	AGE GROUP								
	32	42	52	53	62	63	72	73	TOTAL
MALE	1,972	9,563	41,606	493	18,732	197	986	789	74,338
PERCENT	1.34	6.51	28.30	.34	12.74	.13	.67	.54	50.57
AV LENGTH	414.25	536.64	719.36	760.00	843.19	696.50	924.30	842.63	723.20
STD ERROR	5.75	7.57	3.47	30.41	7.17	11.50	25.36	23.14	2.87
SAMP SIZE	20	97	422	5	190	2	10	8	754
FEMALE	0	99	22,479	493	45,548	99	1,479	2,465	72,662
PERCENT		.07	15.29	.34	30.99	.07	1.01	1.68	49.43
AV LENGTH		711.00	777.47	731.00	847.89	691.00	879.13	853.04	825.72
STD ERROR			4.38	29.43	2.39		10.92	10.62	2.07
SAMP SIZE	0	1	228	5	462	1	15	25	737
BOTH SEX	1,972	9,662	64,085	986	64,280	296	2,465	3,254	147,000
PERCENT	1.34	6.57	43.60	.67	43.73	.20	1.68	2.21	100.00
AV LENGTH	414.25	538.43	739.74	745.50	846.52	694.66	897.20	850.52	773.88
STD ERROR	5.75	7.49	2.72	21.16	2.69	7.67	12.08	9.81	1.78
SAMP SIZE	20	98	650	10	652	3	25	33	1,491

Table 43. Nushagak-Igushik District commercial catch of chum salmon sex, age, length (mm), and weight (kg), 1982.

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	SAMPLE PERIOD 6/26 - 7/ 6				TOTAL
	AGE GROUP				
	31	41	51	61	
MALE	3,353	53,654	51,418	1,118	109,543
PERCENT	.77	12.34	11.83	.26	25.19
AV LENGTH	535.33	582.19	597.98	610.00	588.45
STD ERROR	30.47	3.43	4.15		2.74
SAMP SIZE	3	48	46	1	98
AV WEIGHT		.74	.85		.79
STD ERROR		.05	.11		.05
SAMP SIZE	0	6	4	0	10
FEMALE	2,236	138,605	181,080	3,353	325,274
PERCENT	.51	31.88	41.65	.77	74.81
AV LENGTH	516.00	568.23	570.19	579.00	569.07
STD ERROR	22.00	12.27	1.59	16.29	5.31
SAMP SIZE	2	124	162	3	291
AV WEIGHT		4.82	.62		2.44
STD ERROR		4.18	.02		2.48
SAMP SIZE	0	19	13	0	32
BOTH SEX	5,589	192,259	232,498	4,471	434,817
PERCENT	1.29	44.22	53.47	1.03	100.00
AV LENGTH	527.60	572.13	576.34	586.75	573.95
STD ERROR	20.29	8.90	1.54	12.22	4.03
SAMP SIZE	5	172	208	4	389
AV WEIGHT		3.68	.67		2.03
STD ERROR		3.18	.03		1.89
SAMP SIZE	0	25	17	0	42

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Table 44. Nushagak-Mulchatna River escapement of chum salmon sex, age, and length (mm), 1982.

SAMPLE PERIOD 7/2 - 7/10					
	AGE GROUP				
	31	41	51	61	TOTAL
MALE	1,173	52,373	93,800	7,817	155,163
PERCENT	.46	20.46	36.64	3.05	60.61
AV LENGTH	566.00	603.09	613.18	638.85	610.71
STD ERROR	25.24	1.98	1.95	6.01	1.40
SAMP SIZE	3	134	240	20	397
FEMALE	782	51,200	46,510	2,345	100,837
PERCENT	.31	20.00	18.17	.92	39.39
AV LENGTH	531.00	568.40	581.80	592.00	574.84
STD ERROR	27.00	2.20	2.43	11.70	1.62
SAMP SIZE	2	131	119	6	258
BOTH SEX	1,955	103,573	140,310	10,162	256,000
PERCENT	.76	40.46	54.81	3.97	100.00
AV LENGTH	552.00	585.94	602.78	628.04	596.58
STD ERROR	18.60	1.48	1.53	5.36	1.06
SAMP SIZE	5	265	359	26	655

Table 45. Nushagak-Igushik District commercial catch of pink salmon sex, age, length (mm), and weight (kg), 1982.

SAMPLE PERIOD 7/21 - 7/29		
	AGE GROUP	TOTAL
	21	
MALES	1,031,239	1,031,239
PERCENT	77.00	77.00
AV LENGTH	464.05	464.05
STD ERROR	.92	.92
SAMP SIZE	539	539
AV WEIGHT	1.80	1.80
STD ERROR	.02	.02
SAMP SIZE	130	130
FEMALES	308,033	308,033
PERCENT	23.00	23.00
AV LENGTH	450.33	450.33
STD ERROR	1.49	1.49
SAMP SIZE	161	161
AV WEIGHT	1.62	1.62
STD ERROR	.04	.04
SAMP SIZE	36	36
BOTH SEX	1,339,272	1,339,272
PERCENT	100.00	100.00
AV LENGTH	460.89	460.89
STD ERROR	.79	.79
SAMP SIZE	700	700
AV WEIGHT	1.76	1.76
STD ERROR	.02	.02
SAMP SIZE	166	166

Table 46. Nuyakuk River daily pink salmon escapement counts, 1982.

DATE	DAILY COUNT	ACCUMULATIVE COUNT	DAILY PERCENT OF TOTAL	ACCUMULATIVE PERCENT
JULY 8	42	42	.00	.00
9	48	90	.00	.01
10	66	156	.00	.01
11	126	282	.01	.02
12	576	858	.04	.06
13	588	1,446	.04	.09
14	600	2,046	.04	.13
15	234	2,280	.02	.15
16	558	2,838	.04	.18
17	2,580	5,418	.17	.35
18	4,374	9,792	.28	.64
19	6,456	16,248	.42	1.06
20	10,290	26,538	.67	1.73
21	13,032	39,570	.85	2.57
22	17,418	56,988	1.13	3.71
23	24,876	81,864	1.62	5.32
24	25,812	107,676	1.68	7.00
25	25,662	133,338	1.67	8.67
26	35,124	168,462	2.28	10.96
27	45,870	214,332	2.98	13.94
28	61,626	275,958	4.01	17.95
29	66,294	342,252	4.31	22.26
30	77,976	420,228	5.07	27.33
31	83,856	504,084	5.45	32.78
AUG 1	60,720	564,804	3.95	36.73
2	66,996	631,800	4.36	41.09
3	64,440	696,240	4.19	45.28
4	74,574	770,814	4.85	50.13
5	93,228	864,042	6.06	56.19
6	125,352	989,394	8.15	64.34
7	129,450	1,118,844	8.42	72.76
8	87,564	1,206,408	5.69	78.45
9	36,594	1,243,002	2.38	80.83
10	53,688	1,296,690	3.49	84.33
11	22,038	1,318,728	1.43	85.76
12	24,702	1,343,430	1.61	87.37
13	40,986	1,384,416	2.67	90.03
14	35,172	1,419,588	2.29	92.32
15	29,592	1,449,180	1.92	94.24
16	31,662	1,480,842	2.06	96.30
17	25,596	1,506,438	1.66	97.97
18	17,364	1,523,802	1.13	99.10
19	12,360	1,536,162	.80	99.90
20	1,554	1,537,716	.10	100.00

Table 47. Nuyakuk River escapement of pink salmon sex, age, and length (mm), 1982.

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SAMPLE PERIOD 7/23 - 8/17		
	AGE GROUP	TOTAL
	2+	
MALES	771,428	771,428
PERCENT	48.45	48.45
AV LENGTH	448.40	448.40
STD ERROR	1.52	1.52
SAMP SIZE	329	329
FEMALES	820,668	820,668
PERCENT	51.55	51.55
AV LENGTH	435.98	435.98
STD ERROR	1.20	1.20
SAMP SIZE	350	350
BOTH SEX	1,592,096	1,592,096
PERCENT	100.00	100.00
AV LENGTH	442.00	442.00
STD ERROR	.96	.96
SAMP SIZE	679	679

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Table 48. Togiak District commercial salmon catch by species and fishing effort by gear type, 1982.

Period	Hours	Drift	Set	Sockeye	Chinook	Chum	Pink	Coho	Total
June 14	120			1,236	1,537	382			3,155
21	15	8		167	176	24			367
22	24	75		1,603	3,762	602			5,967
23	24	81		2,056	2,392	863	1		5,312
24	24	78		2,150	1,774	1,142			5,066
25	24	58		1,365	1,366	903	2		3,636
28	15	9		461	669	76	1		1,207
29	24	36		3,491	3,447	909			7,847
30	24	63		4,391	2,616	1,174	3		8,184
July 1	24	49		4,405	1,893	1,250	10		7,558
2	24	27		2,107	962	899	2		3,970
5	15	47		9,608	1,410	5,744	103		16,865
6	24	94		35,071	2,868	13,236	318		51,493
7	24	91		36,006	1,310	7,875	288		45,479
8	24	101		34,905	1,329	8,978	370		45,582
9	24	86		28,115	842	8,790	227		37,974
10	24	71		19,999	387	3,467	232		24,085
11	24	18		8,507	120	902	57		9,586
12	24	75		21,020	685	6,791	272		28,768
13	24	108		29,564	897	12,872	466		43,799
14	24	105		27,307	732	8,120	917		37,076
15	24	108		25,049	440	6,946	592		33,027
16	24	109		18,875	313	5,701	477		25,366
17	24	41		14,465	199	4,431	168		19,263
18	24	30		11,994	92	2,979	189		15,254
19	24	105		28,581	208	9,078	900		38,767
20	24	164		38,771	294	9,635	1,539	7	50,246
21	24	164		31,591	163	5,329	1,523	3	38,609
22	24	119		21,270	138	2,591	856	2	24,857
23	24	113		20,120	73	2,689	1,032	4	23,918
24	24	111		17,848	90	2,477	1,559	2	21,976
25	24	30		6,488	14	758	465	3	7,728
26	24	142		16,428	99	2,452	1,082	13	20,074
27	24	78		8,349	52	1,041	684	25	10,151
28	24	123		10,437	62	1,459	1,777	47	13,782
29	24	83		7,638	27	1,351	1,518	42	10,576
30	24	44		5,812	37	871	720	80	7,520
31	24	57		6,138	26	1,205	907	127	8,403
Aug 1	120			26,086	183	3,642	3,655	1,554	35,120
9	120			4,189	26	986	351	10,667	16,219
16	120			1,816	59	325	128	55,963	58,291
23	120			205	16	45	23	53,987	54,276
30	120			12	1	10	3	9,567	9,593
Sept 6	120							1,672	1,672
Total				595,696	33,786	151,000	23,417	133,765	937,664
Percent				63.53	3.60	16.10	2.50	14.27	100.00

Catch summary by section in Togiak District

Section	Sockeye	Chinook	Chum	Pink	Coho	Total
Togiak	581,718	33,607	146,566	22,644	108,000	892,535
Kulukak	13,952	175	4,419	765	12,154	31,465
Osviak	5		10	3	10,689	10,707
Matogak	21	4	5	5	2,922	2,957
Total	595,696	33,786	151,000	23,417	133,765	937,664

Table 49. Togiak River catch and escapement of sockeye salmon by age group and sex, 1982.

	AGE GROUP								TOTAL
	31	32	41	42	52	53	62	63	
<b>CATCH</b>									
<b>MALES</b>									
NUMBER	305	0	1,220	29,791	150,613	2,752	2,110	51,768	238,559
PERCENT	.05	.00	.20	5.00	25.28	.46	.35	8.69	40.05
<b>FEMALES</b>									
NUMBER	305	0	2,745	29,057	250,748	6,581	902	66,799	357,137
PERCENT	.05	.00	.46	4.88	42.09	1.10	.15	11.21	59.95
<b>SEXES COMBINED</b>									
NUMBER	610	0	3,965	58,848	401,361	9,333	3,012	118,567	595,696
PERCENT	.10	.00	.67	9.88	67.38	1.57	.51	19.90	100.00
<b>ESCAPEMENT</b>									
<b>MALES</b>									
NUMBER	447	223	670	26,568	91,982	893	447	17,191	138,421
PERCENT	.15	.08	.23	9.20	31.86	.31	.15	5.96	47.95
<b>FEMALES</b>									
NUMBER	670	223	1,563	48,001	88,186	1,340	447	9,823	150,253
PERCENT	.23	.08	.54	16.63	30.55	.46	.15	3.40	52.05
<b>SEXES COMBINED</b>									
NUMBER	1,117	446	2,233	74,569	180,168	2,233	894	27,014	288,674
PERCENT	.39	.15	.77	25.83	62.41	.77	.31	9.36	100.00
<b>CATCH AND ESCAPEMENT</b>									
<b>MALES</b>									
NUMBER	752	223	1,890	56,359	242,595	3,645	2,557	68,959	376,980
PERCENT	.09	.03	.21	6.37	27.43	.41	.29	7.80	42.63
<b>FEMALES</b>									
NUMBER	975	223	4,308	77,058	338,934	7,921	1,349	76,622	507,390
PERCENT	.11	.03	.49	8.71	38.32	.90	.15	8.66	57.37
<b>SEXES COMBINED</b>									
NUMBER	1,727	446	6,198	133,417	581,529	11,566	3,906	145,581	884,370
PERCENT	.20	.05	.70	15.09	65.76	1.31	.44	16.46	100.00

Note: Escapement includes 3,500 spawners counted down river from the counting tower and 40,400 spawners in the tributaries (Tables 2 through 6, and 52). Does not include 52,570 spawners in the Kulukak River, Lake, and Tithe Creek Ponds.

Table 50. Togiak District commercial catch of sockeye salmon sex, age, length (mm), and weight (kg) by period, 1982.

	SAMPLE PERIOD 1 6/23- 7/ 1		AGE GROUP					TOTAL
	31	41	42	52	53	62	63	
MALES	0	0	410	9,056	34	137	889	10,526
PERCENT			1.92	42.47	.16	.64	4.17	49.36
AV LENGTH			521.17	589.32	551.00	618.75	589.54	586.94
STD ERROR			6.24	1.30		8.65	3.18	1.18
SAMP SIZE	0	0	12	265	1	4	26	308
AV WEIGHT			2.17	3.70			3.62	3.65
STD ERROR				.09				.09
SAMP SIZE	0	0	1	33	0	0	1	35
FEMALES	0	0	752	9,227	34	68	718	10,799
PERCENT			3.53	43.27	.16	.32	3.37	50.64
AV LENGTH			514.73	556.12	536.00	570.00	555.19	553.20
STD ERROR			4.40	1.19		5.00	4.34	1.10
SAMP SIZE	0	0	22	270	1	2	21	316
AV WEIGHT			2.26	3.00			2.94	2.97
STD ERROR				.07			.27	.07
SAMP SIZE	0	0	1	27	0	0	3	31
BOTH SEX	0	0	1,162	18,283	68	205	1,607	21,325
PERCENT			5.45	85.74	.32	.96	7.54	100.00
AV LENGTH			517.00	572.56	543.50	602.50	574.19	569.85
STD ERROR			3.60	.88		6.00	2.62	.81
SAMP SIZE	0	0	34	535	2	6	47	624
AV WEIGHT			2.22	3.38			3.11	3.33
STD ERROR				.06			.27	.06
SAMP SIZE	0	0	2	60	0	0	4	66

Note: Includes 13,978 catch in Kulukak section.

-Continued-

Table 50. Togiak District commercial catch of sockeye salmon sex, age, length (mm), and weight (kg) by period, 1982 (continued).

	SAMPLE PERIOD 2 7/ 2- 7/13		AGE GROUP					TOTAL
	31	41	42	52	53	62	63	
MALES	0	0	8,340	71,724	278	1,668	13,066	95,076
PERCENT			3.71	31.89	.12	.74	5.81	42.27
AV LENGTH			519.20	591.28	590.00	601.67	608.34	587.48
STD ERROR			4.54	1.26		7.71	2.64	1.11
SAMP SIZE	0	0	30	258	1	6	47	342
AV WEIGHT			3.08	4.05			4.37	4.00
STD ERROR			.27	.09			.47	.08
SAMP SIZE	0	0	2	24	0	0	2	28
FEMALES	0	0	10,008	100,636	1,668	834	16,680	129,826
PERCENT			4.45	44.75	.74	.37	7.42	57.73
AV LENGTH			499.78	562.33	522.83	581.00	577.42	559.06
STD ERROR			3.86	1.16	12.88	11.00	2.49	1.02
SAMP SIZE	0	0	36	362	6	3	60	467
AV WEIGHT			2.19	3.15	2.44		3.23	3.09
STD ERROR			.27	.07			.09	.06
SAMP SIZE	0	0	3	35	1	0	8	47
BOTH SEX	0	0	18,348	172,360	1,946	2,502	29,746	224,902
PERCENT			8.16	76.64	.87	1.11	13.23	100.00
AV LENGTH			508.61	574.38	532.43	594.78	591.00	571.07
STD ERROR			2.95	.86	12.88	6.31	1.82	.75
SAMP SIZE	0	0	66	620	7	9	107	809
AV WEIGHT			2.55	3.52	2.44		3.46	3.43
STD ERROR			.20	.05			.12	.05
SAMP SIZE	0	0	5	59	1	0	10	75

Note: Includes 13,978 catch in Kulukak section.

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Table 50. Togiak District commercial catch of sockeye salmon sex, age, length (mm), and weight (kg) by period, 1982 (continued).

	SAMPLE PERIOD 3 7/14- 7/30							TOTAL
	31	41	42	AGE GROUP 52	53	62	63	
MALES	305	1,220	21,041	69,833	2,440	305	37,813	132,957
PERCENT	.09	.35	6.02	19.98	.70	.09	10.82	38.05
AV LENGTH	525.00	555.00	516.00	591.14	522.00	570.00	600.09	579.99
STD ERROR		8.41	3.04	1.35	7.27		1.64	.99
SAMP SIZE	1	4	69	229	8	1	124	436
AV WEIGHT	2.99		2.55	3.92	2.49		4.07	3.76
STD ERROR			.17	.10			.16	.08
SAMP SIZE	1	0	5	24	1	0	13	44
FEMALES	305	2,745	18,297	140,885	4,879	0	49,401	216,512
PERCENT	.09	.79	5.24	40.31	1.40		14.14	61.95
AV LENGTH	506.00	559.89	502.35	562.02	519.19		574.10	558.66
STD ERROR		7.54	2.17	.94	3.74		1.40	.73
SAMP SIZE	1	9	60	462	16	0	162	710
AV WEIGHT		3.49	2.25	3.27	2.31		3.34	3.14
STD ERROR			.10	.05			.12	.04
SAMP SIZE	0	1	11	51	1	0	17	81
BOTH SEX	610	3,965	39,338	210,718	7,319	305	87,214	349,469
PERCENT	.17	1.13	11.26	60.30	2.09	.09	24.96	100.00
AV LENGTH	515.50	558.39	509.65	571.67	520.13	570.00	585.37	566.78
STD ERROR		5.82	1.91	.77	3.47		1.07	.59
SAMP SIZE	2	13	129	691	24	1	286	1,146
AV WEIGHT	2.99	3.49	2.34	3.48	2.40		3.66	3.35
STD ERROR			.09	.05			.10	.04
SAMP SIZE	1	1	16	75	2	0	30	125

Note: Includes 13,978 catch in Kulukak section.

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Table 50. Togiak District commercial catch of sockeye salmon sex, age, length (mm), and weight (kg) by period, 1982 (continued).

	ALL PERIODS COMBINED							TOTAL
	31	41	42	AGE GROUP 52	53	62	63	
MALES	305	1,220	29,791	150,613	2,752	2,110	51,768	238,559
PERCENT	.05	.20	5.00	25.28	.46	.35	8.69	40.05
AV LENGTH	525.00	555.00	516.97	591.10	529.23	598.20	601.99	583.28
STD ERROR		8.41	2.35	.75	5.81	5.25	1.28	.62
SAMP SIZE	1	4	111	752	10	11	197	1,086
AV WEIGHT	2.99		2.69	3.97	2.49		4.14	3.83
STD ERROR			.13	.05			.15	.05
SAMP SIZE	1	0	8	81	1	0	16	107
FEMALES	305	2,745	29,057	250,748	6,581	902	66,799	357,137
PERCENT	.05	.46	4.88	42.09	1.10	.15	11.21	59.95
AV LENGTH	506.00	559.89	501.79	561.93	520.20	580.17	574.73	558.64
STD ERROR		7.54	1.81	.63	4.25	6.90	1.18	.52
SAMP SIZE	1	9	118	1,094	23	5	243	1,493
AV WEIGHT		3.49	2.23	3.21	2.34		3.31	3.14
STD ERROR			.09	.04			.08	.03
SAMP SIZE	0	1	15	113	2	0	28	159
BOTH SEX	610	3,965	58,848	401,361	9,333	3,012	118,567	595,696
PERCENT	.10	.67	9.88	67.38	1.57	.51	19.90	100.00
AV LENGTH	515.50	558.39	509.47	572.87	522.86	592.80	586.63	568.51
STD ERROR		5.82	1.47	.48	3.45	4.20	.87	.40
SAMP SIZE	2	13	229	1,846	33	16	440	2,579
AV WEIGHT	2.99	3.49	2.46	3.50	2.38		3.67	3.41
STD ERROR			.07	.03			.07	.03
SAMP SIZE	1	1	23	194	3	0	44	266

Note: Includes 13,978 catch in Kulukak section.

Table 51. Togiak River daily sockeye salmon escapement counts, 1982.

DATE	DAILY COUNT	ACCUMULATIVE COUNT	DAILY PERCENT OF TOTAL	ACCUMULATIVE PERCENT
JUNE 27	0	0	.00	.00
28	0	0	.00	.00
29	0	0	.00	.00
30	12	12	.00	.00
JULY 1	162	174	.07	.07
2	18	192	.01	.08
3	108	300	.04	.12
4	246	546	.10	.22
5	1,056	1,602	.43	.65
6	2,124	3,726	.87	1.52
7	4,686	8,412	1.91	3.44
8	7,872	16,284	3.22	6.65
9	10,602	26,886	4.33	10.98
10	9,690	36,576	3.96	14.94
11	7,500	44,076	3.06	18.00
12	10,482	54,558	4.28	22.28
13	9,750	64,308	3.98	26.27
14	13,320	77,628	5.44	31.71
15	17,226	94,854	7.04	38.74
16	12,246	107,100	5.00	43.75
17	8,556	115,656	3.49	47.24
18	3,492	119,148	1.43	48.67
19	5,340	124,488	2.18	50.85
20	5,610	130,098	2.29	53.14
21	6,270	136,368	2.56	55.70
22	9,792	146,160	4.00	59.70
23	10,236	156,396	4.18	63.88
24	5,418	161,814	2.21	66.09
25	3,546	165,360	1.45	67.54
26	3,918	169,278	1.60	69.14
27	4,938	174,216	2.02	71.16
28	5,316	179,532	2.17	73.33
29	5,370	184,902	2.19	75.52
30	7,242	192,144	2.96	78.48
31	8,580	200,724	3.50	81.99
AUG 1	10,242	210,966	4.18	86.17
2	6,828	217,794	2.79	88.96
3	5,844	223,638	2.39	91.35
4	4,308	227,946	1.76	93.11
5	3,360	231,306	1.37	94.48
6	3,426	234,732	1.40	95.88
7	2,730	237,462	1.12	96.99
8	2,376	239,838	.97	97.96
9	2,328	242,166	.95	98.91
10	1,746	243,912	.71	99.63
11	912	244,824	.37	100.00

note: Not included in the daily tower counts were 3,450 spawners counted down river of the counting tower and 40,400 counted in the tributaries, of which all were part of the Togiak section of the Togiak district.

Table 52. Togiak River escapement of sockeye salmon sex, age, and length (mm) by period, 1982.

	SAMPLE PERIOD 1 7/10- 7/19								TOTAL
	31	32	41	AGE GROUP			62	63	
				42	52	53			
MALES	0	0	0	8,972	40,748	748	187	8,224	58,879
PERCENT				7.21	32.73	.60	.15	6.61	47.30
AV LENGTH				524.00	600.90	540.00	569.00	606.90	589.15
STD ERROR				2.66	1.39	7.65		2.61	1.11
SAMP SIZE	0	0	0	48	218	4	1	44	315
FEMALES	0	0	0	17,197	43,365	748	187	4,112	65,609
PERCENT				13.81	34.83	.60	.15	3.30	52.70
AV LENGTH				493.00	564.60	504.70	564.00	575.10	545.81
STD ERROR				2.59	1.33	24.20		4.18	1.17
SAMP SIZE	0	0	0	92	232	4	1	22	351
BOTH SEX	0	0	0	26,169	84,113	1,496	374	12,336	124,488
PERCENT				21.02	67.57	1.20	.30	9.91	100.00
AV LENGTH				503.63	582.19	522.35	566.50	596.30	566.30
STD ERROR				1.93	.96	12.69		2.23	.81
SAMP SIZE	0	0	0	140	450	8	2	66	666

Note: Tower counts only (Table 51). Does not include lower river, tributary, or Kulukak estimates.

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Table 52. Togiak River escapement of sockeye salmon sex, age, and length (mm) by period, 1982 (continued).

SAMPLE PERIOD 2	7/20- 8/ 8								TOTAL
	AGE GROUP								
	31	32	41	42	52	53	62	63	
MALES	384	192	576	13,627	37,233	0	192	6,333	58,537
PERCENT	.32	.16	.48	11.32	30.94		.16	5.26	48.64
AV LENGTH	515.00	535.00	587.70	528.40	601.80		624.00	600.40	583.71
STD ERROR	7.00		5.77	3.28	1.44			2.94	1.25
SAMP SIZE	2	1	3	71	194	0	1	33	305
FEMALES	576	192	1,343	23,607	31,283	384	192	4,222	61,799
PERCENT	.48	.16	1.12	19.62	26.00	.32	.16	3.51	51.36
AV LENGTH	497.00	393.00	558.10	499.50	565.50	564.00	571.00	570.10	539.28
STD ERROR	13.45		8.73	2.59	1.53	7.00		3.20	1.30
SAMP SIZE	3	1	7	123	163	2	1	22	322
BOTH SEX	960	384	1,919	37,234	68,516	384	384	10,555	120,336
PERCENT	.80	.32	1.59	30.94	56.94	.32	.32	8.77	100.00
AV LENGTH	504.20	464.00	566.98	510.08	585.23	564.00	597.50	588.28	560.89
STD ERROR	8.54		6.35	2.03	1.05	7.00		2.18	.90
SAMP SIZE	5	2	10	194	357	2	2	55	627

Note: Tower counts only (Table 51). Does not include lower river, tributary, or Kulukak estimates.

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Table 52. Togiak River escapement of sockeye salmon sex, age, and length (mm) by period, 1982 (continued).

ALL PERIODS COMBINED									
	AGE GROUP								
	31	32	41	42	52	53	62	63	TOTAL
MALE	447	223	670	26,568	91,982	893	447	17,191	138,421
PERCENT	.15	.08	.23	9.20	31.86	.31	.15	5.96	47.95
AV LENGTH	515.00	535.00	587.67	526.63	601.31	540.00	596.50	604.13	586.46
STD ERROR	7.00		5.79	2.23	1.00	7.65	27.50	1.97	.83
SAMP SIZE	2	1	3	119	412	4	2	77	620
FEMALE	670	223	1,563	48,001	88,186	1,340	447	9,823	150,253
PERCENT	.23	.08	.54	16.63	30.55	.46	.15	3.40	52.05
AV LENGTH	497.00	393.00	558.14	496.70	564.99	524.50	567.50	572.61	542.69
STD ERROR	13.45		8.71	1.86	1.00	19.83	3.50	2.63	.88
SAMP SIZE	3	1	7	215	395	6	2	44	673
BOTH SEX	1,117	446	2,233	74,569	180,168	2,233	894	27,014	288,674
PERCENT	.39	.15	.77	25.83	62.41	.77	.31	9.36	100.00
AV LENGTH	504.20	464.00	567.00	507.36	583.53	530.70	582.00	592.67	563.68
STD ERROR	8.54	.00	6.34	1.43	.71	12.28	13.86	1.58	.61
SAMP SIZE	5	2	10	334	807	10	4	121	1,293

Note: Includes 3,500 spawners counted down river from the counting tower and 40,400 spawners in the tributaries (Tables 2 through 6, and 49). Does not include 52,750 spawners in the Kulukak River, Lake, and Tithe Creek Ponds.

Sex, age, weight, and length data on the catch and escapement of chinook salmon are presented in Tables 53 and 54, respectively. Sex, age, weight, and length data on the chum salmon catch are presented in Table 55.

In this and previous compilations of catch and escapement data, the Kulukak section catch has been included in the Togiak catch. It may not be footnoted as such in the older reports (Table 2 through 4 and 49 through 52).

The Togiak escapement has not been presented consistently in the historical reports. In this and some older reports, the Togiak escapement included the spawners in the lower river below the counting tower and from the tributaries (i.e., Gechiak, Pungokepuk, Ongivinuck, Ungalikthluk/Kukayachagak, and other minor river systems). Appendix Table 3 summarizes the differences between the Togiak and Kulukak components between 1965 and 1982.

#### Return from Escapement

Appendix Tables 4 and 12 presents the sockeye salmon returns from escapement by brood year for nine river systems incorporating the Japanese mothership, South Peninsula and Togiak only data presented in Appendix Tables 1 through 3. Returns from escapement by brood year for Nushagak-Mulchatna chinook, Togiak chinook, and Nuyakuk pink salmon are presented in Appendix Tables 13 and 14, respectively.

#### ACKNOWLEDGMENTS

We express thanks to Steve Morstad for his help on the A-W-L tables.

Table 53. Togiak District commercial catch of chinook salmon sex, age, length (mm), and weight (kg), 1982.

SAMPLE PERIOD 6/22 - 7/12										
	AGE GROUP									TOTAL
	32	41	42	52	53	62	63	72	73	
MALE	483	60	3,017	14,842	241	4,404	1,026	483	241	24,797
PERCENT	1.43	.18	8.93	43.93	.71	13.03	3.04	1.43	.71	73.39
AV LENGTH	438.00	520.00	559.98	728.39	570.50	821.05	738.82	945.00	798.50	721.99
STD ERROR	18.60		12.12	4.57	32.86	10.52	15.38	16.56	59.59	3.77
SAMP SIZE	8	1	50	246	4	73	17	8	4	411
AV WEIGHT	1.76		3.58	7.42	4.48	10.12	7.04	14.92	9.88	7.45
STD ERROR			.83	.27	.18	.57	.64		2.88	.22
SAMP SIZE	1	0	9	62	2	21	7	1	3	106
FEMALE	0	0	121	3,137	0	4,343	302	664	422	8,989
PERCENT			.36	9.28		12.85	.89	1.97	1.25	26.61
AV LENGTH			613.50	793.12		845.39	761.20	933.36	856.29	828.21
STD ERROR			78.50	6.14		5.43	58.29	11.34	13.67	4.19
SAMP SIZE	0	0	2	52	0	72	5	11	7	149
AV WEIGHT				9.37		10.32	6.01	13.02	11.11	10.08
STD ERROR				.39		.35	2.16	.32	1.27	.25
SAMP SIZE	0	0	0	18	0	27	2	2	2	51
BOTH SEX	483	60	3,138	17,979	241	8,747	1,328	1,147	663	33,786
PERCENT	1.43	.18	9.29	53.21	.71	25.89	3.93	3.39	1.96	100.00
AV LENGTH	438.00	520.00	562.04	739.68	570.50	833.14	743.91	938.26	835.28	750.25
STD ERROR	18.60		12.04	3.92	32.86	5.94	17.80	9.58	23.35	2.99
SAMP SIZE	8	1	52	298	4	145	22	19	11	560
AV WEIGHT	1.76		3.58	7.76	4.48	10.22	6.81	13.82	10.66	8.14
STD ERROR			.83	.22	.18	.32	.69	.21	1.80	.17
SAMP SIZE	1	0	9	80	2	48	9	3	5	157

Table 54. Togiak River escapement of chinook salmon sex, age, length (mm), and weight (kg), 1982.

	SAMPLE PERIOD 6/22 - 7/12									
	AGE GROUP									TOTAL
	32	42	52	53	62	63	72	73	82	
MALES	243	1,581	7,420	122	2,342	487	304	122	0	12,621
PERCENT	1.43	9.30	43.65	.72	13.78	2.86	1.79	.72		74.24
AV LENGTH	438.00	558.73	728.62	570.50	820.44	713.37	943.50	798.50		722.52
STD ERROR	18.60	11.68	4.60	32.85	10.00	17.36	13.87	59.58		3.74
SAMP SIZE	8	52	244	4	77	16	10	4	0	415
AV WEIGHT	1.76	3.58	7.42	4.49	10.00	6.18	13.13	9.88		7.39
STD ERROR		.83	.27	.18	.55	.59	1.79	2.88		.22
SAMP SIZE	1	9	61	2	22	7	2	3	0	107
FEMALES	0	0	1,581	0	2,160	91	304	213	30	4,379
PERCENT			9.30		12.71	.54	1.79	1.25	.18	25.76
AV LENGTH			793.12		844.10	821.67	930.10	856.29	692.00	830.75
STD ERROR			6.14		5.50	28.58	11.99	13.67		3.71
SAMP SIZE	0	0	52	0	71	3	10	7	1	144
AV WEIGHT			9.37		10.32	8.16	13.02	11.11		10.16
STD ERROR			.39		.35		.32	1.27		.24
SAMP SIZE	0	0	18	0	27	1	2	2	0	50
BOTH SEX	243	1,581	9,001	122	4,502	578	608	335	30	17,000
PERCENT	1.43	9.30	52.95	.72	26.48	3.40	3.58	1.97	.18	100.00
AV LENGTH	438.00	558.73	739.95	570.50	831.79	730.42	936.80	835.24	692.00	750.40
STD ERROR	18.60	11.68	3.94	32.85	5.83	15.30	9.17	23.35		2.94
SAMP SIZE	8	52	296	4	148	19	20	11	1	559
AV WEIGHT	1.76	3.58	7.76	4.49	10.15	6.49	13.07	10.66		8.10
STD ERROR		.83	.23	.18	.31	.52	.91	1.80		.17
SAMP SIZE	1	9	79	2	49	8	4	5	0	157

Table 55. Togiak District commercial catch of chum salmon sex, age, length (mm), and weight (kg), 1982.

	SAMPLE PERIOD 6/23 - 7/29				
	AGE GROUP				TOTAL
	31	41	51	61	
MALES	1,600	31,200	18,600	1,200	52,600
PERCENT	1.06	20.66	12.32	.79	34.83
AV LENGTH	529.62	586.20	612.39	645.83	595.10
STD ERROR	12.48	2.29	3.58	12.83	1.92
SAMP SIZE	8	156	93	6	263
AV WEIGHT	2.49	3.93	4.19	5.46	4.01
STD ERROR	0.00	.10	.21	.07	.09
SAMP SIZE	1	49	21	2	73
FEMALES	5,600	58,800	33,200	800	98,400
PERCENT	3.71	38.94	21.99	.53	65.17
AV LENGTH	526.32	562.15	577.57	574.50	565.41
STD ERROR	5.57	1.28	1.98	4.97	1.06
SAMP SIZE	28	294	166	4	492
AV WEIGHT	2.67	3.14	3.27	0.00	3.16
STD ERROR	.21	.05	.07	0.00	.04
SAMP SIZE	7	70	36	0	113
BOTH SEX	7,200	90,000	51,800	2,000	151,000
PERCENT	4.77	59.60	34.30	1.32	100.00
AV LENGTH	527.05	570.49	590.07	617.30	575.76
STD ERROR	5.15	1.15	1.81	7.95	.96
SAMP SIZE	36	450	259	10	755
AV WEIGHT	2.63	3.41	3.60	5.46	3.46
STD ERROR	.19	.05	.09	.07	.04
SAMP SIZE	8	119	57	2	186

## LITERATURE CITED

Bill, Don. 1983. 1981 and 1982 Alagnak (Branch) River sockeye salmon spawning surveys. Bristol Bay Data Report No. 95. 10 pp.

APPENDICES

Appendix Table 1. Japanese mothership fishery catch of 2-ocean sockeye salmon of Bristol Bay origin by year of maturity, 1957 to 1982.

YEAR	3(1)	4(1)	4(2)	5(1)	5(2)	5(3)	6(2)	6(3)	6(4)	7(3)	7(4)	8(4)	total
1957													
MATURING :	38	13172	310646	0	3450277	1352760	2608	1300843	1048	2122	10486	0	6444000
IMMATURE :	0	2494	0	0	653309	0	494	246315	0	402	1986	0	905000
TOTAL :	38	15666	310646	0	4103586	1352760	3102	1547158	1048	2524	12472	0	7349000
1958													
MATURING :	0	519	100753	89	78605	96268	1053	86477	1426	159	651	0	366000
IMMATURE :	0	34	0	6	5160	0	69	5678	0	10	43	0	11000
TOTAL :	0	553	100753	95	83765	96268	1122	92155	1426	169	694	0	377000
1959													
MATURING :	273	1387	209929	0	43327	257941	245	38702	12720	126	350	0	565000
IMMATURE :	0	544	0	0	16994	0	96	15180	0	49	137	0	33000
TOTAL :	273	1931	209929	0	60321	257941	341	53882	12720	175	487	0	598000
1960													
MATURING :	740	4329	3001380	65	266527	212193	88	143787	9399	182	1310	0	3640000
IMMATURE :	0	905	0	14	55701	0	18	30050	0	38	274	0	87000
TOTAL :	740	5234	3001380	79	322228	212193	106	173837	9399	220	1584	0	3727000
1961													
MATURING :	118	30029	136020	893	3487541	1813779	1200	316704	6638	3405	18475	4198	5819000
IMMATURE :	0	2410	0	72	279910	0	96	25419	0	273	1483	337	310000
TOTAL :	118	32439	136020	965	3767451	1813779	1296	342123	6638	3678	19958	4535	6129000
1962													
MATURING :	84	987	191811	997	77703	390114	1737	168416	277	355	519	0	833000
IMMATURE :	0	500	0	505	39361	0	880	85311	0	180	263	0	127000
TOTAL :	84	1487	191811	1502	117064	390114	2617	253727	277	535	782	0	960000
1963													
MATURING :	2203	14107	263627	0	154181	251211	501	232381	9312	30	1447	0	929000
IMMATURE :	0	2523	0	0	27570	0	90	41553	0	5	259	0	72000
TOTAL :	2203	16630	263627	0	181751	251211	591	273934	9312	35	1706	0	1001000
1964													
MATURING :	250	1204	132061	3	36288	66419	13	15803	432	0	1527	0	254000
IMMATURE :	0	1318	0	3	39704	0	14	17290	0	0	1671	0	60000
TOTAL :	250	2522	132061	6	75992	66419	27	33093	432	0	3198	0	314000
1965													
MATURING :	69	5046	142755	0	349542	5471944	106	128299	1494	0	745	0	6100000
IMMATURE :	0	8794	0	0	609140	0	184	223584	0	0	1298	0	843000
TOTAL :	69	13840	142755	0	958682	5471944	290	351883	1494	0	2043	0	6943000
1966													
MATURING :	17	1572	116418	78	302348	262900	279	840382	4777	36	2193	0	1531000
IMMATURE :	0	554	0	27	106504	0	98	296032	0	13	772	0	404000
TOTAL :	17	2126	116418	105	408852	262900	377	1136414	4777	49	2965	0	1935000

-Continued-

Appendix Table 1. Japanese mothership fishery catch of 2-ocean sockeye salmon of Bristol Bay origin by year of maturity, 1957 to 1982 (continued).

YEAR	3(1)	4(1)	4(2)	5(1)	5(2)	5(3)	6(2)	6(3)	6(4)	7(3)	7(4)	8(4)	total
1967													
MATURING :	154	2600	95809	140	110545	478048	642	171043	2489	126	4404	0	866000
IMMATURE :	0	503	0	27	21384	0	124	33086	0	24	852	0	56000
TOTAL :	154	3103	95809	167	131929	478048	766	204129	2489	150	5256	0	922000
1968													
MATURING :	336	2075	337728	125	184387	211924	883	119544	5097	64	1837	0	864000
IMMATURE :	0	141	0	9	12534	0	60	8127	0	4	125	0	21000
TOTAL :	336	2216	337728	134	196921	211924	943	127671	5097	68	1962	0	885000
1969													
MATURING :	325	757	463344	0	50282	229379	33	42556	3408	0	916	0	791000
IMMATURE :	0	9933	0	0	659483	0	436	558140	0	0	12008	0	1240000
TOTAL :	325	10690	463344	0	709765	229379	469	600696	3408	0	12924	0	2031000
1970													
MATURING :	184	5239	299260	0	234039	2819014	0	84944	7225	0	1095	0	3451000
IMMATURE :	0	8326	0	0	371940	0	0	134994	0	0	1740	0	517000
TOTAL :	184	13565	299260	0	605979	2819014	0	219938	7225	0	2835	0	3968000
1971													
MATURING :	276	2628	84082	0	362365	254723	615	136318	493	0	500	0	842000
IMMATURE :	0	6314	0	0	870524	0	1478	327483	0	0	1201	0	1207000
TOTAL :	276	8942	84082	0	1232889	254723	2093	463801	493	0	1701	0	2049000
1972													
MATURING :	226	940	134009	6	162572	222671	1202	185268	819	148	2139	0	710000
IMMATURE :	0	1579	0	9	273204	0	2021	311344	0	249	3594	0	592000
TOTAL :	226	2519	134009	15	435776	222671	3223	496612	819	397	5733	0	1302000
1973													
MATURING :	130	22130	56715	1515	261319	55574	1425	223348	329	418	2097	0	625000
IMMATURE :	0	9245	0	633	109170	0	595	93306	0	175	876	0	214000
TOTAL :	130	31375	56715	2148	370489	55574	2020	316654	329	593	2973	0	839000
1974													
MATURING :	93	235	46460	116	32080	157074	427	14323	107	40	45	0	251000
IMMATURE :	0	1289	0	634	175789	0	2339	78485	0	219	245	0	259000
TOTAL :	93	1524	46460	750	207869	157074	2766	92808	107	259	290	0	510000
1975													
MATURING :	73	1039	41478	0	60567	459745	476	73392	7835	118	277	0	645000
IMMATURE :	0	5416	0	0	315610	0	2479	382436	0	616	1443	0	708000
TOTAL :	73	6455	41478	0	376177	459745	2955	455828	7835	734	1720	0	1353000
1976													
MATURING :	122	3518	105567	0	173665	356244	232	99609	32306	110	7627	0	779000
IMMATURE :	0	2742	0	0	135390	0	181	77655	0	86	5946	0	222000
TOTAL :	122	6260	105567	0	309055	356244	413	177264	32306	196	13573	0	1001000

-Continued-

Appendix Table 1. Japanese mothership fishery catch of 2-ocean sockeye salmon of Bristol Bay origin by year of maturity, 1957 to 1982 (continued).

YEAR	3(1)	4(1)	4(2)	5(1)	5(2)	5(3)	6(2)	6(3)	6(4)	7(3)	7(4)	8(4)	total
1977													
MATURING :	132	3354	90183	358	100162	160733	177	179098	4096	23	1684	0	540000
IMMATURE :	0	2684	0	287	80170	0	142	143351	0	18	1348	0	228000
TOTAL :	132	6038	90183	645	180332	160733	319	322449	4096	41	3032	0	768000
1978													
MATURING :	126	95	66804	29	31191	9581	883	14460	362	80	389	0	124000
IMMATURE :	0	660	0	200	217089	0	6148	100640	0	558	2705	0	328000
TOTAL :	126	755	66804	229	248280	9581	7031	115100	362	638	3094	0	452000
1979													
MATURING :	8	56	18956	0	9021	36258	22	3524	118	0	37	0	68000
IMMATURE :	0	1041	0	3	168153	0	416	65687	0	0	693	7	236000
TOTAL :	8	1097	18956	3	177174	36258	438	69211	118	0	730	7	304000
1980													
MATURING :	25	213	34880	0	39552	98709	59	6318	233	0	11	0	180000
IMMATURE :	0	1890	0	0	351360	0	523	56129	0	0	98	0	410000
TOTAL :	25	2103	34880	0	390912	98709	582	62447	233	0	109	0	590000
1981													
MATURING :	0	208	22675	0	55258	40713	42	17976	78	2	48	0	137000
IMMATURE :	0	1929	0	4	511736	0	389	166471	0	23	448	0	681000
TOTAL :	0	2137	22675	4	566994	40713	431	184447	78	25	496	0	818000
1982													
MATURING :	8	36	11937	2	36968	3428	403	10180	0	35	3	0	63000
IMMATURE :	0	284	0	13	294972	0	3212	81220	0	277	22	0	380000
TOTAL :	8	320	11937	15	331940	3428	3615	91400	0	312	25	0	443000

Appendix Table 2. South Peninsula June sockeye (interception) fishery catch by age class, 1957 to 1982.

YEAR	3(1)	3(2)	4(1)	4(2)	4(3)	5(1)	5(2)	5(3)	5(4)	6(2)	6(3)	6(4)	7(3)	7(4)	8(4)	total
56	0	0	307	171421	0	207	46548	82096	0	28	28577	952	0	213	0	330349
57	1	1	336	7917	0	0	87928	34474	0	66	33151	27	54	267	0	164222
58	0	36	190	36837	1037	32	28739	35196	114	385	31617	521	58	238	0	135000
59	38	197	192	29043	100	0	5994	35686	0	34	5354	1760	17	48	0	78463
60	32	11	185	128225	443	3	11387	9066	35	4	6143	402	8	56	0	156000
61	5	34	1310	5936	28	39	152195	79152	0	52	13821	290	149	806	183	254000
62	33	18	386	74999	266	390	30382	152535	11	679	65851	108	139	203	0	326000
63	352	172	2254	42119	401	0	24634	40136	0	80	37128	1488	5	231	0	149000
64	236	252	1137	124732	3833	3	34275	62733	11	12	14926	408	0	1442	0	244000
65	9	304	641	18128	88	0	44387	694853	0	13	16292	190	0	95	0	775000
66	6	0	597	44232	309	30	114875	99887	0	106	319296	1815	14	833	0	582000
67	45	391	763	28128	364	41	32454	140348	0	189	50216	731	37	1293	0	255000
68	219	2521	1351	219880	9889	82	120047	137975	75	575	77830	3319	41	1196	0	575000
69	1673	0	1120	517417	0	0	54813	245493	0	0	33770	1693	0	1021	0	857000
70	0	0	1071	142544	0	0	146131	1345170	0	0	43270	3209	0	1605	0	1683000
71	0	0	0	156994	0	0	221420	160930	0	0	61903	0	0	8753	0	610000
72	166	13	687	97956	0	4	118835	162765	0	879	135425	599	108	1563	0	519000
73	0	20	6452	12560	469	0	162010	8490	0	0	71680	0	0	319	0	262000
74	22	15	56	11043	327	27	7625	37335	0	101	3404	25	9	11	0	60000
75	27	49	384	15335	429	0	22393	169975	55	176	27134	2897	44	102	0	239000
76	48	20	1385	41578	148	0	68398	140307	23	91	39231	12724	43	3004	0	307000
77	58	425	1481	39827	100	158	44234	70983	0	78	79093	1809	10	744	0	239000
78	486	1700	365	256965	8333	111	119976	36852	0	3398	55620	1391	308	1495	0	487000
79	0	0	2289	315779	4043	0	70885	440145	0	0	28859	0	0	0	0	862000
80	4395	9350	0	586323	0	0	223607	2420379	0	0	56014	2932	0	0	0	3303000
81	15689	0	4303	338455	0	0	564765	674826	0	0	226962	0	0	0	0	1825000
82	0	0	3628	437003	0	0	1114939	177293	0	0	388137	0	0	0	0	2121000

Note: Age composition for 1957 through 1968, 1972, and 1974 through 1978 were based on Bristol Bay pooled catch and escapement (inshore) age compositions.

South Peninsula catch between 1956 and 1959 from South Unimak (statistical area 284) and Shumagin Islands (statistical area 282).

South Peninsula catch between 1960 and 1982 from South Unimak (statistical area 284) in June and early July and Shumagin Islands (statistical area 282) in June.

Appendix Table 3. Catch and escapement in Togiak and Kulukak sections of Togiak District.

Year	TOGIAK				KULUKAK & OTHERS			
	CATCH Togiak	Lake	River	ESCAPEMENT Other Total	Kulukak	CATCH Other	total	ESCAPEMENT Kulukak
60	139,648							
61	188,788				3,373		3,373	
62	92,273				672		672	
63	185,506				707		707	
64	242,489				8,286		8,286	
65	213,835	88,386		8,100	96,486	1,883	3,265	16,300
66	190,479	91,098		13,100	104,198	7,263	2,057	9,320
67	71,512	69,330		12,000	81,330	24,379	5,216	29,595
68	65,475	42,918		7,000	49,918	2,618	4,606	7,224
69	129,615	109,266		7,400	116,666	3,411	1,226	4,637
70	152,748	192,096		10,800	202,896		629	629
71	200,507	190,842		9,400	200,242	7,927	626	8,553
72	51,354	74,070		4,500	78,570	17,244	6,663	23,907
73	75,694	95,730		11,200	106,930	15,551	4,478	20,029
74	110,932	82,992	12,000	8,600	103,592	13,615	14,840	28,455
75	184,856	160,962	12,200	7,400	180,562	3,821	237	4,058
76	293,016	158,190	15,000	16,200	189,390	4,822	4,045	8,867
77	201,004	133,734	4,400	24,400	162,534	16,252	1,195	17,447
78	422,100	273,576	15,000	17,600	306,176	29,668	248	29,916
79	393,337	171,138	14,200	12,900	198,238	66,629	1,018	67,647
80	591,470	461,850	27,900	37,000	526,750	42,811	280	43,091
81	620,288	208,080	21,150	77,900	307,130	19,246	173	19,419
82	581,718	244,824	3,450	40,400	288,674	13,952	26	13,978

Note: Other escapement from Gechiak, Pungokepuk, Ongivinuck, Ungalikthluk/Kukayachagak, and other minor river systems.

Note: Other catch from Osviak, Matogak, Cape Peirce, and Ungalikthluk sections.

Appendix Table 4. Kvichak River sockeye salmon escapement and return by brood year including estimated interception catch (in thousands).

BROOD YEAR	ESCAPEMENT	RETURN BY AGE CLASS														TOTAL	
		3(1)	3(2)	4(1)	4(2)	4(3)	5(1)	5(2)	5(3)	5(4)	6(2)	6(3)	6(4)	7(3)	7(4)		8(4)
1950	0	0	0	0	0	0	0	0	0	0	0	271	0	0	0	0	271
1951	0	0	0	0	0	0	0	242	3671	0	0	983	0	1	0	0	4897
1952	0	0	0	0	10819	0	0	6681	2956	0	0	654	1	0	1	0	21113
1953	0	0	0	0	91	0	0	62	365	0	0	60	0	0	0	16	593
1954	0	0	0	0	81	17	0	29	643	0	0	0	0	0	29	0	799
1955	0	0	0	0	251	14	0	101	589	0	0	531	20	0	0	0	1504
1956	9443	0	14	0	24287	0	0	6965	6471	0	0	1307	0	0	0	0	39045
1957	2843	8	0	0	243	0	0	244	3331	0	2	258	0	0	2	0	4088
1958	535	0	0	0	76	0	0	48	135	0	0	26	0	0	3	0	288
1959	680	0	0	0	211	1	0	116	206	0	0	11	0	0	0	0	546
1960	14630	0	0	1	1313	134	0	562	46736	0	0	6481	10	0	6	0	55243
1961	3706	1	0	0	334	0	0	190	2292	0	0	678	5	0	0	0	3500
1962	2581	0	0	0	104	2	0	151	4668	0	0	407	12	0	4	0	5349
1963	339	0	0	0	48	3	0	50	638	0	0	366	3	0	9	0	1118
1964	957	0	8	0	2226	105	0	407	2342	0	0	647	8	0	2	0	5745
1965	24326	0	25	0	9856	484	0	471	32942	0	0	1232	2	0	1	0	45012
1966	3775	4	11	6	496	11	0	1078	4229	0	0	384	0	1	0	0	6220
1967	3216	0	0	5	342	2	0	271	810	0	0	86	0	0	0	0	1516
1968	2557	0	0	0	292	0	0	34	77	0	5	132	0	0	2	0	542
1969	8394	0	0	1	128	7	0	321	4221	0	0	594	19	0	11	0	5303
1970	13935	0	1	0	43	40	0	13	14461	6	0	849	412	0	7	0	15832
1971	2387	0	0	0	244	18	0	93	2170	0	0	303	2	0	0	0	2830
1972	1010	0	0	0	255	1	0	159	1206	0	22	297	0	0	0	0	1941
1973	227	0	0	2	576	2	2	1027	274	0	3	542	28	0	0	0	2456
1974	4434	0	9	1	6328	309	0	2006	16714	0	8	761	23	0	5	0	26164
1975	13140	0	5	0	5676	302	0	1230	30185	0	0	598	2	0	0	0	37999
1976	1965	0	5	11	5288	43	0	824	4104	0	4	273	0	0	0	0	10552
1977	1341	11	43	5	1928	2	0	932	207	0	0	98	0	0	0	0	3226
1978	4149	0	0	0	1833	16	0	1139	1307	0	0	834	11	0	4	0*	5143*
1979	11218	1	57	4	18159	73	0	2245	17627	0	0	3379	0	0*	0*	0*	41546*
1980	22505	0	2	6	2922	14	0	1536	8012	0	0	0*	0*	0*	0*	0*	12493*
1981	1754	0	0	10	942	0	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	952*
1982	1135	23	0	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	23*

Note: Interception catch from Japanese mothership fishery and South Peninsula June sockeye fishery.

\* denotes incomplete returns from brood year escapement.

Appendix Table 5. Branch River sockeye salmon escapement and return by brood year including estimated interception catch (in thousands).

BROOD YEAR	ESCAPEMENT	RETURN BY AGE CLASS															TOTAL
		3(1)	3(2)	4(1)	4(2)	4(3)	5(1)	5(2)	5(3)	5(4)	6(2)	6(3)	6(4)	7(3)	7(4)	8(4)	
1950	0	0	0	0	0	0	0	0	0	0	0	286	0	0	0	0	286
1951	0	0	0	0	0	0	0	321	373	0	0	43	0	0	0	0	738
1952	0	0	0	0	416	0	0	295	131	0	0	115	0	0	1	0	958
1953	0	0	0	0	5	0	0	11	64	0	0	0	0	0	0	0	80
1954	0	0	0	0	14	3	0	109	392	0	0	141	0	0	1	0	661
1955	0	0	0	0	788	0	0	237	26	0	0	44	0	0	0	0	1095
1956	784	5	0	0	1886	0	0	458	0	0	0	38	3	0	0	0	2391
1957	127	0	0	0	5	0	0	23	43	0	0	13	0	0	1	0	85
1958	95	0	0	0	43	0	0	26	27	0	0	52	0	0	0	0	147
1959	825	0	0	0	301	0	0	265	122	0	0	76	1	0	2	0	767
1960	1241	0	0	0	105	0	0	184	135	0	0	31	0	0	0	0	456
1961	90	0	10	1	89	1	0	185	7	0	0	0	0	0	0	0	292
1962	91	0	19	0	129	0	0	91	3	0	0	18	1	0	0	0	261
1963	203	0	0	0	199	1	0	140	34	0	0	1	0	0	0	0	375
1964	249	0	5	0	99	2	0	98	113	0	0	17	0	0	0	0	335
1965	175	0	6	0	104	1	0	161	10	0	0	17	0	0	0	0	299
1966	174	0	13	0	282	0	0	260	12	0	0	11	0	0	0	0	579
1967	203	0	9	8	285	1	0	51	46	0	0	7	0	0	0	0	407
1968	194	3	5	0	126	0	0	40	2	0	0	3	0	0	0	0	180
1969	182	0	0	0	4	1	0	54	105	0	0	25	0	0	0	0	190
1970	177	0	0	0	73	0	0	71	6	0	0	2	0	0	0	0	152
1971	187	0	2	0	26	0	0	28	31	0	0	37	0	0	2	0	126
1972	151	0	1	0	91	0	0	17	7	0	0	14	0	0	0	0	130
1973	35	0	0	0	97	1	0	130	18	0	0	2	0	0	0	0	248
1974	215	0	4	0	292	5	0	18	128	0	0	8	0	0	0	0	455
1975	100	0	15	0	414	0	0	339	3	0	1	1	0	0	0	0	774
1976	82	0	26	0	211	0	0	168	20	0	0	55	0	0	0	0	480
1977	100	0	26	0	141	1	0	698	0	0	4	9	0	0	0	0	878
1978	229	0	1	0	102	0	0	67	39	0	0	142	0	0	0	0*	352*
1979	294	0	3	3	454	2	0	285	32	0	0	3	0	0*	0*	0*	783*
1980	298	0	0	0	102	0	0	198	13	0	0	0*	0*	0*	0*	0*	313*
1981	82	0	0	0	66	0	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	66*

Note: Interception catch from Japanese mothership fishery and South Peninsula June sockeye fishery.

\* Denotes incomplete returns from brood year escapement.

Appendix Table 6. Naknek River sockeye salmon escapement and return by brood year including estimated interception catch (in thousands).

BROOD YEAR	ESCAPEMENT	RETURN BY AGE CLASS														TOTAL	
		3(1)	3(2)	4(1)	4(2)	4(3)	5(1)	5(2)	5(3)	5(4)	6(2)	6(3)	6(4)	7(3)	7(4)		8(4)
1950	0	0	0	0	0	0	0	0	0	0	0	1196	0	2	5	0	1203
1951	0	0	0	0	0	0	0	1417	747	0	0	1250	0	1	0	0	3416
1952	0	0	0	0	86	0	0	1199	108	0	7	176	1	0	2	0	1578
1953	0	0	0	0	24	0	0	135	177	3	0	206	42	0	1	1	589
1954	0	0	0	0	85	19	0	302	2129	0	0	588	0	13	3	0	3138
1955	0	0	0	0	720	1	0	821	214	0	0	88	2	4	2	0	1852
1956	1773	0	1	0	474	0	0	1701	3	0	17	304	0	0	0	0	2501
1957	635	0	0	0	53	2	0	328	505	0	1	671	5	0	3	0	1568
1958	278	0	0	0	112	4	0	210	537	0	0	168	3	0	2	0	1037
1959	2232	0	0	0	348	7	0	351	742	0	0	704	0	0	0	0	2152
1960	828	0	1	1	1408	9	0	625	696	0	0	1277	1	1	2	0	4020
1961	351	0	0	0	239	3	0	744	315	0	3	638	0	0	8	0	1951
1962	723	0	0	0	76	4	0	229	351	0	2	396	13	0	1	0	1071
1963	905	0	0	0	136	8	0	389	831	0	0	627	7	0	1	0	1999
1964	1350	0	1	0	446	24	0	264	1135	0	0	177	11	0	1	0	2060
1965	718	0	5	0	540	44	0	360	732	0	0	435	1	0	1	0	2118
1966	1016	1	4	0	728	2	0	2287	166	0	1	628	0	1	0	0	3817
1967	756	0	0	2	319	6	0	623	400	0	0	355	0	1	0	0	1706
1968	1023	0	3	0	151	0	0	233	83	0	0	269	2	0	2	0	743
1969	1331	0	0	0	47	3	0	307	976	0	0	1209	5	0	3	0	2550
1970	733	0	1	0	154	19	0	317	1845	0	0	370	12	0	0	0	2718
1971	936	0	1	0	397	24	0	559	1428	0	0	1844	3	9	8	0	4274
1972	587	0	3	0	245	3	0	241	161	0	3	598	9	0	1	0	1264
1973	357	0	0	0	494	0	0	618	524	0	0	597	0	0	0	0	2234
1974	1241	0	2	0	232	3	0	228	1025	0	1	782	5	0	5	0	2282
1975	2027	0	1	0	424	11	0	1743	1390	0	0	1637	1	8	0	0	5216
1976	1321	0	4	0	1081	3	0	4039	1571	0	21	1490	0	28	1	0	8239
1977	1086	2	10	7	633	0	0	2264	95	0	63	395	0	1	5	0	3475
1978	813	0	1	0	330	4	0	1668	1112	0	11	513	1	0	0	0*	3641*
1979	925	0	4	1	2414	4	0	942	788	0	9	393	4	0*	0*	0*	4559*
1980	2645	0	1	1	711	13	0	1405	1182	0	0	0*	0*	0*	0*	0*	3314*
1981	1796	0	4	0	931	11	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	946*
1982	1156	0	4	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	4*

Note: Interception catch from Japanese mothership fishery and South Peninsula June sockeye fishery.

\* Denotes incomplete returns from brood year escapement.

Appendix Table 7. Egegik River sockeye salmon escapement and return by brood year including estimated interception catch (in thousands).

BROOD YEAR	RETURN BY AGE CLASS															TOTAL	
	ESCAPEMENT	3(1)	3(2)	4(1)	4(2)	4(3)	5(1)	5(2)	5(3)	5(4)	6(2)	6(3)	6(4)	7(3)	7(4)		8(4)
1949	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	15
1950	0	0	0	0	0	0	0	0	0	0	0	300	76	4	23	0	402
1951	0	0	0	0	0	0	0	356	1106	0	1	1301	2	0	6	0	2773
1952	0	0	0	0	677	0	0	446	241	0	1	295	19	2	5	0	1687
1953	0	0	0	0	26	0	0	39	435	2	0	337	254	0	12	0	1104
1954	0	0	0	0	11	4	0	13	1190	0	0	642	87	0	46	0	1991
1955	0	0	1	0	20	0	0	163	673	0	0	396	6	1	6	0	1265
1956	1104	0	6	0	2026	0	0	3189	925	0	2	684	1	0	12	0	6845
1957	391	0	0	0	37	0	0	43	1096	0	0	924	70	0	62	0	2232
1958	246	0	0	0	42	2	0	73	815	0	0	308	16	0	3	0	1260
1959	1072	0	0	0	73	2	0	163	1037	0	0	467	14	0	24	0	1781
1960	1799	8	0	0	447	21	0	327	4446	0	1	2558	49	0	50	0	7909
1961	702	0	0	3	82	0	0	229	445	0	1	790	27	0	10	0	1589
1962	1027	0	0	0	22	0	0	69	949	0	0	374	28	0	30	0	1473
1963	998	0	0	1	16	2	0	112	537	1	1	506	74	0	7	0	1256
1964	850	0	1	0	125	6	0	69	1454	1	0	242	73	0	11	0	1982
1965	1445	0	0	0	104	35	0	72	2016	0	4	840	6	2	20	0	3097
1966	804	0	0	1	249	0	0	746	595	0	2	887	7	0	10	0	2499
1967	637	0	0	2	59	2	0	257	663	0	0	621	1	1	2	0	1608
1968	339	0	0	0	41	0	0	56	87	0	0	258	3	5	9	0	458
1969	1016	0	0	0	12	1	0	111	1096	0	0	1139	279	2	113	0	2754
1970	920	0	0	0	59	0	0	89	796	0	1	175	95	0	25	0	1239
1971	634	0	0	0	45	2	0	109	1477	0	0	970	74	1	55	0	2732
1972	546	0	0	1	57	2	0	61	1508	0	0	1253	48	0	18	0	2958
1973	329	0	0	0	76	0	0	135	578	0	0	851	35	0	4	0	1678
1974	1276	0	0	0	131	18	0	99	2223	0	0	495	53	0	3	0	3023
1975	1174	0	0	0	148	9	0	241	2443	2	0	795	14	2	1	0	3655
1976	509	1	1	2	611	59	0	787	2995	0	4	845	0	0	0	0	5305
1977	693	0	2	0	821	1	0	1961	683	0	14	648	52	0	13	0	4195
1978	896	0	0	2	398	6	0	507	6069	0	0	2222	26	5	6	0*	9240*
1979	1032	0	3	0	708	9	3	529	3090	0	5	1586	0	0*	0*	0*	5934*
1980	1061	0	1	18	812	27	0	2109	4487	0	0	0*	0*	0*	0*	0*	7454*
1981	695	0	0	6	633	72	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	711*
1982	1035	2	2	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	4*

Note: Interception catch from Japanese mothership fishery and South Peninsula June sockeye fishery.

\* denotes incomplete returns from brood year escapement.

Appendix Table 8. Ugashik River sockeye salmon escapement and return by brood year including estimated interception catch (in thousands).

BROOD YEAR	ESCAPEMENT	RETURN BY AGE CLASS														TOTAL	
		3(1)	3(2)	4(1)	4(2)	4(3)	5(1)	5(2)	5(3)	5(4)	6(2)	6(3)	6(4)	7(3)	7(4)		8(4)
1949	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
1950	0	0	0	0	0	0	0	0	0	0	1	49	0	0	3	0	53
1951	0	0	0	0	0	0	1	51	189	0	2	118	1	0	0	0	361
1952	0	0	0	1	552	0	0	391	209	0	0	78	2	0	0	0	1233
1953	0	0	0	0	216	0	0	249	420	0	0	216	7	0	0	0	1108
1954	0	0	0	0	24	3	0	28	395	0	0	61	0	0	0	0	511
1955	0	0	0	1	17	1	0	33	118	0	0	7	0	0	0	0	177
1956	425	1	12	0	3167	0	0	837	80	0	2	35	0	0	0	0	4134
1957	215	0	0	1	35	0	0	105	354	0	2	100	4	0	2	0	602
1958	280	0	0	0	63	0	0	105	443	0	0	66	0	0	0	0	678
1959	219	0	0	0	18	0	0	38	310	0	0	132	0	0	1	0	497
1960	2304	0	0	0	674	11	0	295	1563	0	0	487	0	0	0	0	3030
1961	349	0	0	3	240	2	0	500	247	0	1	119	0	0	0	0	1112
1962	255	0	0	2	77	2	0	130	185	0	0	27	0	0	0	0	424
1963	388	0	0	0	13	0	0	21	91	0	0	23	0	0	0	0	148
1964	473	0	0	0	31	9	0	16	245	0	0	18	0	0	2	0	323
1965	997	0	0	0	86	2	0	38	249	0	1	161	1	0	0	0	537
1966	704	1	0	2	723	0	0	1467	89	0	0	21	0	0	0	0	2303
1967	239	0	0	0	55	0	0	50	43	0	0	34	0	0	0	0	183
1968	71	0	0	0	14	0	0	7	15	0	0	3	0	0	0	0	40
1969	160	0	0	0	4	0	0	5	53	0	0	26	2	0	2	0	92
1970	735	0	0	0	4	1	0	2	256	0	1	27	2	0	1	0	294
1971	530	0	0	0	178	0	0	229	282	0	0	130	0	0	1	0	821
1972	79	0	0	0	34	0	0	58	119	0	0	36	2	0	3	0	252
1973	39	0	0	1	16	0	0	7	15	0	0	46	4	0	0	0	89
1974	62	0	0	0	11	9	0	15	600	0	0	82	2	0	0	0	719
1975	429	0	3	0	1477	4	0	572	1710	0	0	324	2	1	0	0	4095
1976	342	0	0	2	2017	58	0	1523	1245	0	7	431	0	0	3	0	5285
1977	201	0	2	18	584	0	0	1589	261	0	10	185	6	1	4	0	2661
1978	70	0	0	6	243	7	0	411	861	0	6	522	1	0	0	0*	2056*
1979	1701	0	19	0	3069	8	0	853	1438	0	15	536	0	0*	0*	0*	5937*
1980	3321	0	1	18	1187	38	0	2163	3280	0	0	0*	0*	0*	0*	0*	6585*
1981	1327	1	2	9	1844	5	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	1850*
1982	1158	0	1	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	1*

Note: Interception catch from Japanese mothership fishery and South Peninsula sockeye fishery.

\* denotes incomplete returns from brood year escapement.

Appendix Table 9. Wood River sockeye salmon escapement and return by brood year including estimated interception catch (in thousands).

BROOD YEAR	ESCAPEMENT	RETURN BY AGE CLASS														TOTAL	
		3(1)	3(2)	4(1)	4(2)	4(3)	5(1)	5(2)	5(3)	5(4)	6(2)	6(3)	6(4)	7(3)	7(4)		8(4)
1950	0	0	0	0	0	0	0	0	0	0	1	63	0	0	0	0	63
1951	0	0	0	0	0	0	0	499	315	0	3	54	0	0	1	0	871
1952	0	0	0	0	750	0	0	558	29	0	2	34	0	0	0	0	1374
1953	0	0	0	0	301	0	0	331	139	0	2	34	0	0	0	0	808
1954	0	0	0	0	1237	0	0	140	1085	0	0	66	0	0	0	0	2528
1955	0	0	0	0	2407	0	0	831	398	0	5	143	0	0	0	0	3783
1956	773	0	0	4	772	0	0	626	24	0	0	0	0	0	0	0	1425
1957	289	0	0	20	136	0	0	256	35	0	0	0	0	0	0	0	448
1958	960	0	1	0	2141	1	0	387	75	0	0	32	0	0	0	0	2638
1959	2209	0	0	1	976	10	0	397	361	0	1	55	0	0	2	0	1802
1960	1016	0	6	0	1470	0	0	1026	107	0	2	98	1	0	0	0	2710
1961	461	0	0	9	255	0	0	1128	22	0	1	29	0	1	1	0	1445
1962	874	1	2	0	979	1	2	406	119	0	5	38	0	0	0	0	1554
1963	721	0	0	0	606	1	0	705	71	0	0	46	0	0	0	0	1430
1964	1076	0	1	6	420	0	0	423	324	0	0	70	0	0	1	0	1246
1965	675	2	1	4	507	1	0	976	77	0	0	183	0	0	2	0	1753
1966	1209	0	7	21	962	0	0	847	44	0	3	59	0	0	0	0	1944
1967	516	0	3	10	600	0	0	171	71	0	2	75	0	0	0	0	932
1968	649	0	1	0	451	0	0	517	6	0	4	19	0	0	0	0	998
1969	604	0	0	3	57	0	0	456	214	0	9	100	0	0	1	0	840
1970	1162	0	2	0	1549	0	0	912	199	0	0	30	0	0	0	0	2693
1971	851	2	0	16	431	0	0	577	199	0	0	53	0	0	0	0	1278
1972	431	2	1	22	777	0	0	616	31	0	17	24	0	0	0	0	1491
1973	330	1	1	1	213	0	0	1120	70	0	0	33	0	0	0	0	1440
1974	1709	0	3	4	2937	4	0	1632	418	0	2	57	0	0	0	0	5057
1975	1270	10	47	0	1584	2	0	1945	405	0	2	696	0	0	0	0	4690
1976	817	0	3	0	2278	3	0	2357	546	0	24	287	0	0	0	0	5497
1977	562	0	20	0	972	0	0	2358	80	0	0	15	0	0	0	0	3444
1978	2267	0	0	0	1335	3	0	1208	619	0	5	120	0	0	0	0*	3290*
1979	1706	0	10	0	2919	0	0	1694	28	0	1	17	0	0*	0*	0*	4669*
1980	2969	2	1	0	492	0	0	1024	83	0	0	0*	0*	0*	0*	0*	1601*
1981	1233	0	0	0	754	0	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	754*
1982	976	0	3	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	3*

Note: Interception catch from Japanese mothership fishery and South Peninsula June sockeye fishery.

\* denotes incomplete returns from brood year escapement.

Appendix Table 10. Igushik River sockeye salmon escapement and return by brood year including estimated interception catch (in thousands).

BROOD YEAR	RETURN BY AGE CLASS															TOTAL	
	ESCAPEMENT	3(1)	3(2)	4(1)	4(2)	4(3)	5(1)	5(2)	5(3)	5(4)	6(2)	6(3)	6(4)	7(3)	7(4)		8(4)
1950	0	0	0	0	0	0	0	0	0	0	1	85	0	0	0	0	85
1951	0	0	0	0	0	0	0	673	67	0	1	29	0	0	2	0	773
1952	0	0	0	0	160	0	0	303	9	0	5	73	0	0	0	0	551
1953	0	0	0	0	98	0	0	1	20	0	3	65	0	0	2	0	189
1954	0	0	0	0	175	0	0	269	204	0	1	113	0	1	0	0	763
1955	0	0	0	0	454	0	0	779	113	0	0	94	0	0	0	0	1439
1956	400	0	0	0	168	0	0	522	12	0	3	36	0	0	0	0	741
1957	130	0	0	0	2	0	0	35	19	0	0	20	0	0	0	0	75
1958	107	0	0	0	14	0	0	71	20	0	0	27	0	0	0	0	132
1959	644	0	0	0	101	0	0	155	91	0	0	22	0	0	0	0	370
1960	495	0	0	3	61	0	0	306	42	0	0	62	0	0	0	0	475
1961	294	0	0	1	33	0	1	391	21	0	0	7	0	0	0	0	454
1962	16	0	0	7	28	0	0	146	5	0	0	14	0	0	0	0	200
1963	92	0	0	0	177	0	0	271	40	0	0	24	0	0	0	0	512
1964	129	0	0	1	194	0	0	495	147	0	0	53	0	0	0	0	890
1965	181	0	0	2	329	0	0	461	220	0	1	113	0	0	0	0	1125
1966	206	0	0	2	82	0	0	534	9	0	0	12	0	0	1	0	640
1967	282	0	0	2	81	0	0	93	15	0	0	15	0	0	0	0	207
1968	195	0	0	1	87	0	0	128	0	0	2	9	0	0	0	0	228
1969	512	0	0	0	1	0	0	123	288	0	2	116	0	0	0	0	529
1970	371	0	0	1	25	0	0	201	65	0	0	52	0	0	0	0	343
1971	211	0	0	1	55	0	0	164	60	1	0	29	0	0	0	0	310
1972	60	0	0	4	89	0	0	112	6	0	8	12	0	0	0	0	231
1973	60	0	0	0	19	0	0	631	24	0	0	24	0	0	0	0	698
1974	359	0	0	9	451	1	0	731	342	0	7	20	0	0	0	0	1561
1975	241	0	0	0	780	0	0	2503	137	0	2	517	0	0	0	0	3938
1976	186	0	0	0	546	3	0	1446	212	0	39	232	0	0	0	0	2479
1977	96	0	0	5	314	0	0	1814	19	0	5	5	0	0	0	0	2162
1978	536	0	0	0	93	0	0	295	71	0	1	17	0	0	0	0*	477*
1979	860	0	0	5	332	0	0	447	16	0	0	5	0	0*	0*	0*	805*
1980	1988	0	0	0	20	0	0	260	22	0	0	0*	0*	0*	0*	0*	302*
1981	591	0	0	0	150	0	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	150*

Note: Interception catch from Japanese mothership fishery and South Peninsula June sockeye fishery.

\* denotes incomplete returns from brood year escapement.

Appendix Table 11. Nuyakuk River sockeye salmon escapement and return by brood year including estimated interception catch (in thousands).

BROOD YEAR	RETURN BY AGE CLASS															TOTAL	
	ESCAPEMENT	3(1)	3(2)	4(1)	4(2)	4(3)	5(1)	5(2)	5(3)	5(4)	6(2)	6(3)	6(4)	7(3)	7(4)		8(4)
1950	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8
1951	0	0	0	0	0	0	0	50	3	0	1	14	0	0	1	0	80
1952	0	0	0	0	6	0	0	150	5	0	3	43	0	0	0	0	208
1953	0	0	0	0	55	0	0	427	6	0	0	1	0	0	0	0	489
1954	0	0	0	0	53	0	0	4	23	0	0	0	0	0	0	0	80
1955	0	0	0	0	52	0	0	10	10	0	0	0	0	0	0	0	72
1956	30	0	0	0	217	0	0	162	0	0	0	0	0	0	0	0	378
1957	57	0	0	0	4	0	0	11	2	0	0	1	0	0	0	0	18
1958	196	0	0	0	93	0	0	307	31	0	0	11	0	0	0	0	442
1959	49	0	0	50	11	0	0	57	3	0	0	9	0	0	0	0	130
1960	146	5	0	4	150	0	0	373	22	0	0	11	0	0	0	0	565
1961	80	1	0	34	37	0	0	301	3	0	0	0	0	0	0	0	375
1962	38	0	0	4	18	0	0	44	0	0	0	1	0	0	0	0	69
1963	167	0	0	10	4	0	0	178	2	0	0	6	0	0	0	0	201
1964	103	1	0	1	15	0	0	61	13	0	0	2	0	0	0	0	93
1965	203	0	0	7	78	0	0	600	30	0	3	48	0	0	0	0	767
1966	161	1	0	5	116	0	0	455	4	0	2	17	0	0	0	0	601
1967	20	0	1	1	9	0	0	152	1	0	0	7	0	0	0	0	171
1968	97	0	0	3	28	0	0	233	0	0	1	6	0	0	0	0	272
1969	70	2	0	21	5	0	1	76	13	0	4	5	0	0	0	0	126
1970	365	0	0	1	88	0	0	732	164	0	1	106	0	0	0	0	1091
1971	224	1	0	16	90	0	0	785	27	0	1	41	0	1	0	0	960
1972	29	0	0	10	50	0	0	303	14	0	45	107	0	0	0	0	530
1973	110	0	0	5	46	0	3	1066	1	0	0	1	0	0	0	0	1121
1974	155	0	0	0	119	0	0	240	7	0	0	0	0	0	0	0	366
1975	670	10	0	0	519	0	0	4411	127	0	4	231	0	1	0	0	5302
1976	425	0	1	9	387	0	0	2700	56	0	40	259	0	0	0	0	3452
1977	233	0	0	15	313	0	1	2063	22	0	122	34	0	0	0	0	2569
1978	577	0	0	0	141	0	0	1092	13	0	4	12	0	0	0	0*	1262*
1979	360	0	1	0	392	0	0	1012	11	0	4	2	0	0*	0*	0*	1423*
1980	3027	1	0	0	125	0	0	471	79	0	0	0*	0*	0*	0*	0*	676*
1981	834	0	0	0	303	0	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	303*
1982	538	1	1	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	2*

Note: Interception catch from Japanese mothership fishery and South Peninsula June sockeye fishery.

\* denotes incomplete returns from brood year escapement.

Appendix Table 12. Togiak River sockeye salmon escapement and return by brood year including estimated interception catch (in thousands).

BROOD YEAR	RETURN BY AGE CLASS															TOTAL	
	ESCAPEMENT	3(1)	3(2)	4(1)	4(2)	4(3)	5(1)	5(2)	5(3)	5(4)	6(2)	6(3)	6(4)	7(3)	7(4)		8(4)
1950	0	0	0	0	0	0	0	0	0	0	0	30	0	0	0	0	30
1951	0	0	0	0	0	0	0	107	58	0	0	9	0	0	0	0	174
1952	0	0	0	0	166	0	0	58	9	0	0	6	0	0	0	0	239
1953	0	0	0	1	31	0	0	84	8	0	0	16	0	2	0	0	143
1954	0	0	0	0	20	0	0	146	12	0	0	0	17	0	0	0	194
1955	0	0	0	0	136	0	0	0	187	8	1	38	0	0	0	0	369
1956	225	0	0	0	4	104	0	306	22	0	1	13	0	0	0	0	450
1957	25	0	2	5	48	0	0	69	20	0	0	36	1	0	0	0	182
1958	72	0	1	2	68	0	0	114	59	0	0	25	0	0	0	0	269
1959	210	0	0	0	141	0	0	92	55	0	0	7	0	0	0	0	296
1960	163	0	0	2	191	0	0	276	22	0	0	52	0	0	0	0	544
1961	122	1	0	3	85	0	0	215	15	0	1	19	0	0	0	0	340
1962	62	0	0	7	48	0	0	102	4	0	0	8	0	0	0	0	170
1963	116	0	0	2	43	0	0	65	19	0	0	24	0	0	0	0	153
1964	105	0	0	1	43	0	0	84	41	0	0	6	0	0	0	0	175
1965	96	0	0	2	154	0	0	181	31	0	0	37	0	0	0	0	405
1966	104	1	0	6	200	0	0	416	4	0	1	9	0	0	0	0	638
1967	81	1	0	6	18	0	0	99	16	0	1	40	0	0	0	0	180
1968	50	0	0	1	49	0	0	189	6	0	3	13	0	0	0	0	262
1969	117	0	0	5	28	0	0	142	25	0	3	12	0	0	0	0	216
1970	203	0	0	1	54	0	0	226	55	0	1	70	0	0	0	0	408
1971	200	0	0	4	106	0	0	317	62	0	1	68	0	2	0	0	561
1972	79	0	0	2	93	0	0	150	21	0	46	56	0	0	0	0	369
1973	107	1	0	10	151	0	0	378	31	0	1	14	0	0	0	0	585
1974	104	0	0	1	256	0	0	321	22	0	3	45	0	1	0	0	649
1975	181	0	0	4	253	0	0	847	86	0	2	56	0	0	0	0	1249
1976	189	0	0	1	188	0	0	539	141	0	4	162	0	0	0	0	1037
1977	163	0	0	3	252	0	0	636	13	0	3	12	0	0	0	0	919
1978	306	0	1	8	146	0	0	435	66	0	0	18	0	0	0	0*	675*
1979	198	2	0	1	266	0	0	307	10	0	0	5	0	0*	0*	0*	591*
1980	527	0	0	0	43	0	0	218	10	0	0	0*	0*	0*	0*	0*	271*
1981	307	0	0	0	61	0	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	61*

Note: Interception catch from Japanese mothership fishery and South Peninsula June sockeye fishery.

\* denotes incomplete returns from brood year escapement.

Appendix Table 13. Nushagak River chinook salmon escapement and return by brood year.

BROOD YEAR	ESCAPEMENT	RETURN BY AGE CLASS														TOTAL	
		3(1)	3(2)	4(1)	4(2)	4(3)	5(1)	5(2)	5(3)	6(1)	6(2)	6(3)	7(2)	7(3)	8(2)		8(3)
1958	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	6
1959	0	0	0	0	0	0	0	0	0	0	0	0	1835	408	166	3	2412
1960	0	0	0	0	0	0	0	0	0	3	48804	3	8083	331	156	3	57383
1961	0	0	0	0	0	0	3	33724	3	331	70595	496	13778	311	3	3	119247
1962	0	0	0	307	16710	3	3465	43710	3	620	76318	156	7006	984	145	3	149430
1963	0	3	3	2146	35628	3	3097	48609	3	124	65139	247	3323	145	3	128	158601
1964	0	3	3	1859	9289	3	2459	31587	3	290	33223	290	891	255	76	3	80234
1965	0	3	775	861	14258	3	1734	83924	3	3	83805	3	3453	226	3	3	189057
1966	40	124	124	7367	14013	3	4706	27470	3	3	38123	151	5045	361	988	330	98811
1967	65	3	3	255	9793	3	1576	16660	76	217	46054	256	24453	330	297	3	99979
1968	70	3	3	826	13809	3	361	18307	3	3	67547	3	8378	592	3	3	109844
1969	35	226	3	361	938	3	3	14475	3	3	29468	789	2347	336	3	3	48961
1970	50	3	3	3	1426	3	3	56670	3	3	73571	1342	4193	622	3	766	138614
1971	40	3	3	3	2465	3	336	55806	504	3	92233	933	12503	6635	3	3	171436
1972	25	3	3	168	33183	3	622	53570	3	3	125279	2808	7315	7577	3	3	230543
1973	35	3	3	3	3106	3	3	81903	3	3	105534	3	12812	3	3	3	203388
1974	70	3	3	512	23729	3	3	42057	2091	3	51025	3	3	3	3	3	119444
1975	70	3	512	3	95347	3	3	145691	3	3	146112	3	6252	6893	3	3	400834
1976	100	3	1568	3	7600	3	3	110475	3	3	146372	8613	4419	1739	3	3	280810
1977	65	3	3	3	89093	3	3	151680	3935	3	201900	3	15031	3	70	3	461736
1978	130	3	3	3	26685	3	3	47442	1396	3	60788	3	22571	3	0	0*	158906*
1979	95	3	2253	3	48284	3	3	69961	3	3	85583	3	0	0*	0*	0*	206102*
1980	141	3	3	3	10293	3	3	49074	3	0	0	0*	0*	0*	0*	0*	59385*
1981	150	3	1201	3	33766	70	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	35043*
1982	147	3	1218	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	1221*

Note: 1965-1981 subsistence catch and escapement apportioned with commercial catch age composition.

\* Denotes incomplete return from brood year escapement.

Appendix Table 14. Togiak River chinook salmon escapement and return by brood year.

BROOD YEAR	ESCAPEMENT	RETURN BY AGE CLASS														TOTAL	
		3(1)	3(2)	4(1)	4(2)	4(3)	5(1)	5(2)	5(3)	6(1)	6(2)	6(3)	7(2)	7(3)	8(2)		8(3)
1959	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	6
1960	0	0	0	0	0	0	0	0	0	0	0	0	1498	820	178	31	2527
1961	0	0	0	0	0	0	0	0	0	3	17350	48	5223	3	3	3	22633
1962	0	0	0	0	0	0	3	2223	3	296	7760	3	1382	3	3	3	11679
1963	0	0	0	3	1428	3	60	5341	3	3	13303	3	656	3	3	3	20812
1964	0	3	3	267	10385	3	593	10851	86	3	16681	3	2353	96	69	3	41399
1965	0	3	3	227	1778	3	831	12184	3	331	22386	237	1462	273	3	3	39727
1966	0	3	3	1137	12184	3	1883	17072	3	137	27386	3	2143	3	405	325	62690
1967	10	3	3	2212	472	3	817	2822	3	3	13224	89	7668	82	3	3	27407
1968	16	3	3	69	919	3	89	5990	3	3	14364	82	3	3	3	3	21540
1969	8	3	3	45	286	3	82	1378	82	3	2113	3	89	3	3	3	4099
1970	15	3	3	3	2565	3	3	8752	3	3	12168	3	1336	3	3	3	24854
1971	20	3	3	3	7859	3	3	15973	177	3	20857	724	1946	7590	3	102	55249
1972	14	305	3	3	15885	3	223	29311	3	3	72878	1849	7986	252	3	3	128710
1973	11	3	3	3	3116	3	3	9633	3	3	20140	3	1018	2036	3	3	35973
1974	15	3	3	3	3309	3	3	4470	3	3	7125	3	514	3	3	3	15451
1975	11	3	98	3	17177	3	3	10178	3	3	16728	257	1741	1024	3	3	47227
1976	14	3	102	3	5089	3	3	13854	770	3	13156	1997	20212	3	3	3	55204
1977	20	3	3	3	19088	3	3	27334	359	3	36210	3	5148	3	3	3	88169
1978	40	3	3	103	4762	3	3	7572	3	3	18208	3	5602	3	0	0*	36271*
1979	20	3	718	3	15451	3	3	21802	3	3	29681	3	0	0*	0*	0*	67673*
1980	12	3	3	3	3450	3	3	6597	3	0	0	0*	0*	0*	0*	0*	10065*
1981	27	3	3	3	10418	3	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	10430*
1982	17	3	106	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	109*

Note: 1965-1981 subsistence catch and escapement apportioned with commercial catch age composition.

\* Denotes incomplete return from brood year escapement.

Appendix Table 15. Nuyakuk River pink salmon escapement and return by brood year (in thousands).

BROOD YEAR	RETURN BY AGE CLASS		
	ESCAPEMENT	2(1)	TOTAL
1958	4000	436	436
1960	146	1423	1423
1962	543	2408	2408
1964	911	3779	3779
1966	1442	3866	3866
1968	2161	570	570
1970	153	126	126
1972	59	999	999
1974	586	1603	1603
1976	863	13735	13735
1978	9386	4988	4988
1980	2785	2943	2943
1982	1657		

Appendix Table 16. Igushik beach setnet commercial catch of sockeye salmon, 1982.

Period	Hours	catch
June 21	12	1,394
23	24	1,962
28	144	8,949
July 4	168	109,101
11	168	36,133
18	168	5,033
25	168	440
Aug 1	144	125
		163,137

note: 15 drift and 68 set

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